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Electrical Merchandising

April, 1921

McGraw-Hill Company, Inc., New York

25 Cents

"Farm Electric" Number



"Now, Joe, we can really enjoy the leisure
hours that electricity gives us on the farm"

*After Sunset
Lightoliers*

Lightolier
COMPANY

569 BROADWAY, New York City

THE GREAT THINGS OF LIFE—HEALTH

This is a reproduction of the Edison MAZDA Lamp full-page advertisement in the Saturday Evening Post of April 30th. It is the fourth in the series, "The Great Things of Life," which is running throughout the year. The next subject is "Travel" and will appear in the June 4th issue, carrying the message of better light with Edison MAZDA Lamps into the Post's 2,000,000 homes.



The Greatest Physician of all is Good Light

NATURE has written this message large—in the red cheeks of children and the rich colors of flowers.

Neither flowers nor families can thrive in the dark; health abounds where radiance is. Read the message tonight in your own youngster's eyes—the greatest physician of all is good light.

Have you ever stopped to think what a miracle Edison MAZDA Lamps have wrought in the working lives of men? Your grandfather toiled in semi-darkness; your work-bench or desk is lighted as only palaces used to be.

And your son will live in an even better lighted world. For MAZDA Service centred in the Research Laboratories of the General Electric Company is responsible for the present high development in lighting; and day by day is working still to produce even more perfect lamps to bear the trademark MAZDA.

EDISON
MAZDA LAMPS

EDISON LAMP WORKS OF GENERAL ELECTRIC COMPANY

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Vol. 25, No. 4

Electrical Merchandising

The Monthly Magazine of the Electrical Trade

April, 1921

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How We Look from a Thousand Feet

BACK in the dark ages of a couple of dozen years ago, when privet hedges were white picket fences, limousines were horse-drawn coaches and the cultivation of the kilowatt was still in its infancy, folks didn't fly much. Insurance agents never thought to ask you whether you were interested in aviation. And if, now and then, one person in a million did indulge in a flight it never got to be a habit with him. That is, not if he lived.

But times, as the jeweler was heard to remark, have changed. The picket fence has long since found its way into the fireplace, furnishing cheery light on the bridge-embattled family. And except for an occasional rent job to the local motion-picture company, the old horse-drawn coach stands aft of the garage (née carriage house) and gathers moss. And in the still night, not oft but constantly, the ear picks up the hum of carbon on copper as the kilowatts and kilovolt-amperes are gaily gathered down at the power house.

A couple of dozen years ago there were two ways to travel: By land and by water. Today

we have a third medium. Drop in to any Paris office and they will say "Good morning! Come by air?" And just as the ownership of motor cars followed rapidly upon the discovery that a gasoline-propelled vehicle could go somewhere and get back through its own efforts, so the ownership of aircraft is on the verge of becoming universal.

And so, Neighbor and Reader, we took out our old DH the other morning, climbed a little altitude and shot us this picture of the home of your favorite publication. *Sooner or later* You will be flying over our festive city, and we shall want you to recognize us from the air. Possibly in the future we will install on the roof a giant model of ELECTRICAL MERCHANDISING'S Standard Attachment Plug, or perhaps a Standard Voltage—with landing lights for your nightly guidance.

Pending that improvement you can locate us by the smell of chocolate candy from the squatly building off our port bow, and by the odor of high-class toilet and bath soap, which means a southeast wind from this point. Drop in and see us!



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There are 6,500,000 farms on this continent. Already 3,500,000 farmers have their own automobiles and (with only 200,000 farm-power plants so far in use) these farmer automobile owners represent at least 3,300,000 immediate prospects for farm-electric plants!

"A Farm Is a Home with a Business Attached"



THE FARM HOME and the FARM BUSINESS can BOTH be electrified, with tremendous advantage and saving. Thus, the salesman who sells farm electrical equipment has a double avenue of approach to his farmer prospect. First, he can interest the prospective customer in the increased production and efficiency made possible by electrifying the farm processes, and, second, he can interest the whole farm family in the greater comforts and conveniences of the electrically equipped farm home.

AND IN BUYING POWER, the farmers and the farm homes of America far surpass any other group. The 6,500,000 farms of this continent have a total valuation of \$80,000,000,000.

Three and one-half million of these farmers have automobiles and are immediate prospects for farm-electric plant sales.

And the annual business receipts of this farm field, as compiled by agricultural authorities, are—

The Buying Power of the Farm

Corn	\$5,000,000,000
Fruit	1,000,000,000
Beef	2,000,000,000
Small grains....	5,000,000,000
	(Wheat, Rye, Oats, Barley)
Poultry	1,000,000,000
Hogs	2,000,000,000
Hay	5,000,000,000
Dairy products.	2,000,000,000
Sheep	1,000,000,000

and other important crops such as cotton, potatoes, tobacco, flax, etc., bring this total up to about

25 Billion Dollars

Electrical Merchandising

The Monthly Magazine of the Electrical Trade

With which is incorporated ELECTRICAL MERCHANDISE

Volume 25

April, 1921

Number 4

Our 300,000 "Farms Electric" Can Sell the Electrical Idea to the Other Farm Millions!

SIX and one-half million farms—valued at eighty billions of dollars, and producing twenty-five billions in annual crops—make up the agricultural resources of this continent.

Already more than three million automobiles are in use by these farmers. Yet the total number of farm light and power plants in service barely exceeds 200,000, and the number of farms obtaining electric service from central lighting companies probably brings the 1921 aggregate well inside 300,000 total "Farms Electric." These figures indicate the opportunity ahead.

But each of the "Farms Electric" already equipped can become a demonstrating center for future sales of electrical farm outfits—whether farm *plants or* line-equipment for providing *central station* service. For there can be no quarrel between the two systems—the farm-electric "isolated plant" and central station "high-line" service. Each type has its own distinct field, and every outfit of one kind which is sold and in use actually builds sales for the other.

Isolated farm-electric plants prepare whole vicinities for central station service later. And every farmer's line that the lighting company promotes and builds is sure to develop many more remote prospects who, out of central station reach, must turn to the farm-electric plant agent.

Evidently then we may expect more and more dealers to take on both types of equipment, supplying each customer with that kind of apparatus which will best meet his requirements.

Every farm plant and "high-line" substation installed helps spread the big idea—the main theme—of *electricity on the farm*. Each installation in use, properly serviced and "satisfaction guaranteed" by a responsible agent, becomes another center for education and sales promotion.

A NEW TYPE of farmer is being turned out in thousands by the agricultural colleges. The young farmer of today is a scientifically trained expert. His wife, often as not, is a graduate in domestic science. Both appreciate the good things of life and the refinements of the home. Both therefore are splendid prospects for electric service.

The "Home Electric" idea has a husky twin in the "Farm Electric" idea. In promoting the "Farm Electric," as in promoting the "Home Electric," the requirements are (1) *local co-operation* of all interests concerned, (2) *good servicing*, and (3) liberal education of prospects. Each farm home already electrified can be a permanent working exhibit to spread the farm-electrical idea.

Let's put our present 300,000 "Farms Electric" to work to sell the electrical idea to the other farm millions!

"We Must Pull Together"

Better Organized Co-operation Urged Between the United States Department of Commerce and Trade Associations and Commercial Bodies—Need for Development of Great Electrification of America's Power Necessities—Local Community Co-operation Is First Necessity to Solution of Present Problems

By HERBERT HOOVER
Secretary of Commerce

THE Department of Commerce should, in the widest sense, be a department of service to the commerce and industry of the country. It is not a department for the regulation of trade and industry. In order to do service to the greatest advantage I wish to establish a wider and better-organized co-operation with the trade and commercial associations, and in a short time will present some plans to this end. I want to see our efforts to push our foreign commerce more closely related to our industries. This sort of enlarged activity is within the original purpose of the department, and requires neither legislation nor burden upon taxpayers. This is no time to ask for appropriations to undertake new work. It is the time to search for economy and reorganization, for effective expenditure on essentials, the reduction of less essentials, and the elimination of duplication.

Outside of voluntary measures, the only immediate extension of service lies in securing greater internal efficiency, in which I am certain all the bureaus join. The future of the department in its abilities to meet the needs of our industries and trade must await the thorough reorganization of the whole executive machinery, now being vigorously undertaken by Congress. The need of it, both in economy and to secure more definite purpose in government departments, does not need demonstration.

Remedies Depend Upon Community Initiative

The great economic difficulties that we inherit from the war are obvious enough and they emphasize the necessity of better governmental machinery to assist in their solution. Their final remedy must rest on the initiative of our own people—the rate of recovery can be expedited by greater

co-operation in the community and with the community by the government, and this department and the whole government wishes to assist wherever it can to stimulate and assist this co-operation.

In the long run, we may as well realize that we must face a lower standard of living in Europe many years ahead. The production costs of her people will in consequence be lower than even before the war. If we meet this competition and still maintain our high standards of living we will have to work harder; we will have to eliminate waste; we will need still further to improve our processes, our labor relationship, and

business methods. If we would so improve our national efficiency and our foreign trade we must consider our transportation, both railway, water and marine, as one system directed to serve the nation as a whole. The development of certain trade routes through our mercantile marine as the real extension of our inland transportation; the improvement of great waterways; the opening of the Great Lakes to ocean-going vessels; the development of great electrification of our power necessities, and the handling of our labor readjustment by moderate men on both sides are all problems that have a fundamental bearing on the recovery in commerce and on our ability to compete.

If I were outlining one of the most essential directions for expansion of governmental activity, it would be in the constructive study and ventilation of the whole gamut of these possible improvements and of elimination of our great wastes in labor, in material, in power and a host of other directions.

Co-operation with Trades and Industries

There are some of these directions in which I believe this department can secure some results by co-operation within the different trades and industries. Through this co-operation we shall be able to improve some of our business practices; to extend the standards in manufactured products which would make great savings to our consumers and promote our foreign commerce. These are not, in any event, however, possible of accomplishment by regulation. They must be accomplished first by proof of necessity, and then by co-operation of the trades which must have a part in their determination and development. I am convinced that they are only too anxious to develop such

WE have three or four million idle men walking the streets, and at the same time we are short more than a million homes; our railways are far below their need in equipment; our power plants, waterways and highways are all far behind our national needs in normal commerce. To apply this idle labor to our capital equipment is one of the first problems of the country. Its solution involves constructive action in many directions, but among other things *definite resolution of each local community to secure co-operation in itself*. In the building trades, for instance, a get-together attitude on the part of labor, material manufacturers and contractors in every locality to eliminate mispractices and bring down the expense of housing would comprise the first step of recovery—of re-employment.

HERBERT HOOVER
Secretary of Commerce

demonstrated things. For instance, every builder knows that modern building codes, standards in sizes and grades of material, etc., would greatly lessen building costs.

There are some economic difficulties arising from the war that will no doubt solve themselves with time, but an infinite amount of misery could be saved if we had the same spirit of spontaneous co-operation in every community for reconstruction that we had in war. Government departments can at least try to do something to inspire such renewed co-operation. For instance, we have three or four million idle men walk-

Another outstanding economic trouble is that our farmers and our manufacturers are overloaded with food, raw material and goods that we cannot market abroad, and at the same time great masses of people overseas are cold and hungry. These people can only purchase on credit pending their own economic recuperation, and our own recuperation depends greatly upon theirs. We are

others, it is being carried out by government leadership and suggestion. Such formal or informal combinations may render the position of our merchants and exporters precarious indeed. Beyond this, where these controls are instituted over their own imports of cotton, food and other agricultural products, they seriously dominate the prices of our own farmers, and where they are instituted to secure control of the world's natural resources in minerals, oils, etc., they may dominate our future supply of these vital raw materials. Our competitors are within their rights in these matters, but we must protect



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thus not facing over-production, but a breakdown of credit links between us and the areas of under-consumption. Congress has provided the way for creation of foreign credits by banking co-operation under the Edge act, and the logical and economic thing in the whole national interest is for our bankers to work something out. Foreign credits are better than rotten food.

There are some new forces in the world's commerce that must cause concern. There is a tendency in European nations definitely to mobilize the export, and in some cases the import, trades for militant commercial invasion. In some instances this is being done under government direction and organization, and often even with government finance; in

ourselves. Our commercial community has the right in law and has been encouraged by Congress to combine for business outside our frontiers, precisely for the purpose of meeting such contingencies as this. But it all requires that our trades co-operate in an enlightened sense of national service, as well as immediate interest.

All together, more economic taxation, tariff, large economy in government through internal bureaus, reorganization and agreements on disarmament and systematic government co-operation will all contribute to help us out of the ditch. We will get out—yet when all is done the rapidity with which we get out will have depended upon the degree to which we pull together.

Electrify the Farms, Young Man!

Home-Town Opportunities that Outshine the Most Glittering "Jobs" of the City

BY F. M. COCKRELL

"YOUNG MAN, go West," was Horace Greeley's famous advice to ambitious manhood. It must have been somebody in the cattle business who horned in with a new version that read: "Young man, buy a mooley cow, go to She-

Farm Electric Plant

Principal Types

- (a) 32 or 110-volt system
- (b) Belt or direct drive
- (c) Manual or automatic control
- (d) With or without batteries

1. He is immediately connected with a live selling organization headed by a high-pressure sales manager, reinforced by an advertising agency, a sales school, and a group of specialists. He will get more sales training in six months than he would get in the ordinary job "on the road" in six years.

2. He has to sell an idea as well as sell goods. Pretty soon he is running full pages in the local paper,

Either one of two sources of electricity—a farm plant or the central station—may supply the customer's installation. Who shall wire the premises and where the appliances shall be purchased are questions answered in the diagrams below.

boygan County and start a cheese factory."

"Go West" is a little too vague for the modern generation and the cheese industry doesn't appeal to a young man with a system full of kilowattic energy. "Electrify the farm," is a slogan more in keeping with present-day opportunities for those who seek worlds to conquer that are worthy of their strength and skill.

There are young fellows in every small town who feel impelled to "get out and get somewhere." They are restless and dissatisfied with petty jobs and small affairs. They want to get hooked up with something big and worth while. "What is there to do in this burg?" they say. "You gotta go to the city if you want to get ahead." And off they go, only to become an insignificant part of a crowd with one chance in a hundred of making a real success.

After all, what is there in the small town for the fellow with a mechanical turn of mind or a leaning toward salesmanship? There isn't enough machinery in the town to keep him busy, and handing things over the counter doesn't come up to his ideas of selling things.

Opportunities Galore

The farm light and power business is made to order for that type. Think of the opportunities and advantages that come with an agency for farm power plants:

thumb affair. Every farm installation must be figured out for itself, if it is to give satisfaction.

4. Each new customer is a prospect for a long list of fixtures and appliances and he must be prepared to advise on the purchase, location and use of the complete electrical system. He becomes the authority on all matters electrical for the farm clientele.

Relations With the Banks

5. The purchase of a farm power outfit usually requires a loan from the bank, so it becomes necessary for

Central Station Service

Methods of Financing

- (a) Line owned by group of farmers
- (b) Line owned by public utility company

the young business man to establish close relations with local bankers and become informed on the methods of procedure in financing deferred or time payments. A few sales will run his business into thousands of dollars and he will probably find it necessary to enlarge his capital by floating some securities of his own.

6. As soon as his business is under way he must maintain a store, keep a wiring gang properly directed, operate a car with demonstrating outfit and probably other cars for service purposes. He must acquire executive ability and keen business judgment to keep employees working efficiently while away and avoid waste of materials and other losses that would decrease his profits.

7. He has the advantage of working in his home town where he can capitalize on his knowledge of the country and the people. He knows at once who are the leaders and therefore the ones to sell first. He can get the right kind of advice when he wants it and can avoid those who buy quickly but pay slowly. Farmers are suspicious of strangers, but he is known and does not have to overcome the handicaps of the newcomer in the small town.

The Broader Outlook

8. He becomes recognized as a rising young man in the county, is invited in on all public affairs, is urged to become a member of the

Installation of Service Wiring

- (a) Already wired
- (b) Wired by farmer ***!
- (c) By electrical contractor
- (d) By farm-plant dealer
- (e) By central station

Purchase of Fixtures, Lamps and Appliances

- (a) Farm-plant specialty dealer
- (b) Electrical contractor-dealer
- (c) Central station company
- (d) Department store
- (e) Mail order house

erecting billboards, making speeches at farmers' meetings, and using every kind of publicity that will help get the idea across. He may even become the town's largest advertiser and therefore the best-known business man in the community.

3. When he sells a farm power plant he must install a complete miniature central station—engine, generator, switchboard, distribution system, interior wiring, outdoor lighting, motors, etc. The ordinary city-house wiring job is a rule-of-

school board or the town council, or perhaps to run for mayor on the "progressive" ticket. He demurs because he is too busy, but finally accepts. In addition to the many local demands upon his time, he must make occasional trips to distant cities to attend sales conventions and rub shoulders with other live wires.

9. He becomes interested in crop conditions of the country as a whole

and soon feels the effect of money rates upon his business. He begins to keep an eye on doings in Wall Street. A change in central-station rates or other authorization of the State Public Utility Commission immediately attracts his attention. It may mean more money for sales promotion for the local public utility company. He has probably figured the advantages of *working with* them

instead of "knocking" their service. He uses a little political ingenuity and gets them to join him in a cooperative educational campaign.

But why go on? Compare the chances of the young man who starts out to "electrify the farm" with those of his bunkie who "gets a job" in the city. Just the difference between being "a man of affairs" and "one of the crowd."

Selling "Farm Electric" Outfits

The Tremendous Field Before the Farm Electric Dealer—Opportunities for the Electrical Contractor—Experiences in Organizing the Sales Staff, Initiating Advertising, Lining Up Prospects and Demonstrating Plants and Equipment

By W. S. ETHERIDGE

THE "Farm Electric" business belongs to the electrical contractor-dealer. It is real business, and it means real profits. And when I say "electrical contractor-dealer," I mean exactly what I say—not the "curbstoner," the wireman, nor yet the accessory merchant.

There was a time, and we can all remember it, when a man, a bicycle, a box of knobs and a coil of wire combined to make an "electrician." It used to be a business of bicycle and doorbell repairs. As the requirements became more exacting and inspections more rigid, knob-and-tube laborers have given place to mechanics who handle conduit, BX and in-closed switches and who are highly trained and highly paid artisans in a field of expert endeavor. Increasing variety of materials and supplies led, logically, to centralized effort, and the "curbstoner" gave way to the electrical contracting company with its wiremen, shopmen and its stock room.

It is to organizations such as this that the attractive farm electric light and power business opens its doors.

There are today about one hundred manufacturers actually producing farm electric equipment—on the one hand light and power plants for isolated service, and on the other step-down substation equipment for farmers' service from high-tension lines. Perhaps half a dozen of these makers dominate the field, in that ample finances permit economical quantity production and nation-wide



Farm electric plant sales are made *not* in the office but on the farm. One of these electric plants weighs from three hundred to eight hundred pounds complete, and a pumping system, vacuum cleaner, extension cord, lamps, etc., add perhaps three hundred pounds more. Getting all these items into a farmer's yard ten miles from town is a problem for the ingenuity of each dealer, but the automobile is the answer.

policies of service after the sale is completed. In the field can be found plants of every type to meet the individual whim of every purchaser. There are single-unit plants and belted plants; plants of one-half kilowatt capacity and plants large enough to handle a town, with every imaginable shade, grade and variation between.

A Prodigious Field—Unscratched

The field itself is enormous and practically virgin. Of the 15,000,000 homes in the United States without

electric light, more than 50 per cent are farm homes. There are 124,000 towns and villages under one thousand population which are practically without electric service. Figuring conservatively on ten churches, stores, halls and homes per town, nearly one and a quarter million additional prospects could be found. Therefore, with approximately 200,000 plants in actual operation today, it means that something like 98 per cent of the field is unscratched.

Now to get back to the dealer

prospect. There are several sales plans which have been tried with varying success. The mail-order house which sells "everything" has carried farm-light plants in its catalog, but the quantity selling of this class of outlet is negligible. The "direct factory representative" has toured county after county and state after state, selling many plants, but both of these plans are doomed to eventual failure because in neither is

Never mind the store and the fixture display room; get that electric plant on the farm on a real dark night and *sign the order with an extension cord stretched from your car to a light right over the kitchen table.*

It has been my privilege to study this business both from the wholesale and retail ends. On the wholesale side I have tried several plans in reaching live dealer prospects.

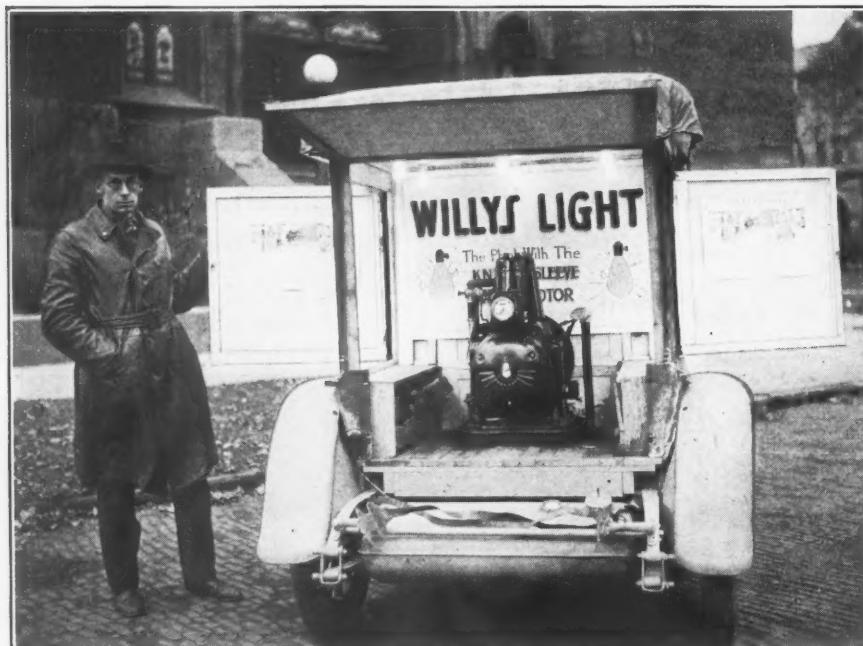
for which a real demand has been created by factory publicity. Don't be fooled by the salesman who says national advertising is "blind." It is true that all clean copy presented to the buying public is a help to the industry as a whole, but do not think for a moment that the said public doesn't remember the name of the particular manufacturer who is paying for that particularly attractive campaign.

To get back to dealer organization: Our company started a distributing office about a year ago. We had a contract for the exclusive distribution of a certain factory's product in a certain definitely outlined territory. A few dealers, whose names were picked up at state fair exhibits, were our only prospects. First-hand, we decided that the successful dealer was the one who worked whole time at our business. We wrote every bank and newspaper in the territory, outlining our dealer proposition and asking co-operation in locating interested parties. Each of these letters was followed by a personal call. Almost to a man the bankers were friendly and cordial, but inasmuch as they were bankers rather than business men, the leads furnished were uniformly discouraging. We met many men of financial worth, but very few live business prospects.

Newspaper Men Are Best Acquainted and Best Informed

The newspaper inquiries gave us better results. I believe the business managers and the advertising managers of the smaller town papers are the best acquainted and best informed men of their communities. Several live dealer prospects were received through the courtesy of automobile dealers, but almost none from the Chamber of Commerce. All the real leads received in the beginning were in answer to factory advertising in trade journals and farm papers.

This led logically to the use of local papers as a medium of solicitation and here again we received some experience. We started with spreads —full page and half page, once a week —on Sundays. It was like throwing money in a sewer, only we didn't even have the fun of hearing it splash. Then we tried smaller ads, in campaigns, say, a week at a time. The first experiment of this sort com-



A very satisfactory form of demonstrating car is one with a closed body, the sides of which open wide, as doors. The back panel comprises a high tail-gate and an upper half that swings into a vertical position. This gives an excellent view of the

plant inside and offers nearly 100 square feet of space for display advertising. By equipping the doors with felt strip a dust-proof body is obtained so that when the salesman "opens up" to make a demonstration he is assured of a clean, fresh display.

there any provision made for "post-sale" service to the plants themselves.

The best plant in the world requires some attention after it is sold. And right here is the bugbear that is keeping many real merchants away from the farm electric plant business. As with the "bears-in-the-dark" that frightened us in childhood, the daylight of intelligent investigations proves them to be but phantoms.

Above All Else—Demonstrate!

Farm electric plants must be sold, "They don't come in an' take 'em away from you." They must be sold—and sold on the job. Just as a demonstration is necessary with every other piece of machinery, so it is with a farm-light plant. "Samples" are wonderful sales helps, but a sample of *electric service* delivered on the farm is the one and only shortcut to electric plant sales.

One company placed dealerships with business houses already firmly established, on the basis of "sell 'em five plants, ship 'em some advertising material and pray for good crops." The dealer usually knew where he could place two or three of the plants and, perhaps a year or so later, unload the balance. Dealers repeating orders averaged about 30 per cent.

Gross Profits and Net Profits

A word about prices, discounts, etc. There is a huge difference between gross and net profits. Look twice before you take on the plant that offers a discount like fixtures. You will usually find that the manufacturer cannot afford to carry the expense of national advertising and comprehensive co-operation, and therefore offers the dealer 40-odd per cent to offset the advantages of handling some competitive material.

(Continued on page 200)

Here's the Ally You Need on the Farm, Mr. Dealer—

The Farmer's Wife Herself

Get Her Support, and She Will Get the Farmer's—The Modern Farm Woman Still Carries Buckets and Toils Over the Washboard, but She Is Keenly Searching for the Things that Will Release Her from Drudgery

"**W**HY call the farm wife 'the woman God forgot'?" asks an indignant agriculture department official. "Why not, rather, 'the woman her countrymen and countrywomen forgot'?"—or, as an afterthought, he might have added "and the farm electric dealer, too!"

To be sure, what with magazine editorials and government investigations and whatnot, it would seem that no one is in danger of forgetting the farm woman just now. Her peculiar problems of existence are being given a thorough public airing, and even in the farm journal she is receiving nearly as much space as are the poultry and livestock. In the process, she is opening out of her shell, examining herself and her world with new eyes, acquiring a new conception of her status in economic life, and learning to assert those rights which she sees are commensurate with the importance of her functions.

So it is that the farm woman is assuming a more and more important rôle in the plans of farm electric dealers—and, in fact, of all those concerned in any way with bringing better living and working conditions to the farm.

We know that, of the small percentage of farms using power for operating the farmer's equipment, only about half use power in the farm home—to drive a washing machine, operate a churn, or heat an electric iron. It is easy to guess that most of these farms were approached through the farmer. And here's the point: Had the farm woman been the first approached, probably not only would electricity be used in more of those farmhouses, but the percentage of farmers using power in field and barn might now be much higher. The farmer is too often the overcautious business man, peering only at the dollars-and-cents end of the order blank; the woman, with her



Perhaps when you're used to back-breaking work, you don't mind it—but that's not the way it works with most people, and farm women are no exception. Sixty-one per cent of them still tote buckets of water. Ten buckets a day means 45 tons of water carried a year! Do you wonder that the farm woman often over-rides her husband's mutterings about "expense" when the question of electric light and water on the farm is being discussed?

repressed longings for an ideal home, supplies the emotional enthusiasm that, in more important decisions than these, has often swept aside the more calculating hesitations of the man.

Fundamentally, the countrywoman and her city sister have the same

major interests—children, and home. The only real difference is that the countrywoman works—actually works, with hardened hands and brittle fingers—harder and longer. And yet, while the city woman had an electric clothes washer long ago, the farm electric dealer passes by the woman bending over a washboard in the yard, to interview Mr. Farmer on installing a plant to help him run a grindstone and hoist hay.

But the farm woman today is rapidly learning that too much of her time is taken up with tasks that do not even concern the town housekeeper.

Why the Farm Woman Is Overworked

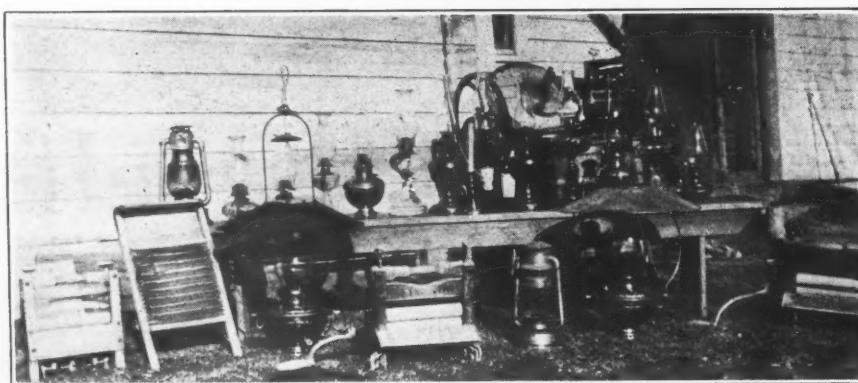
In the city, for example, the lighting of the house seldom receives a thought in the daily routine; in the country, the cleaning and filling of oil lamps is just one of the messiest of the necessary daily jobs.

The daily delivery of the morning milk and bread alone gives the city housewife another hour to lie in bed. In the country, not only do many farmers' wives help with the milking and separating, but 88 per cent of them wash the milk pails and 65 per cent clean the cream separators; and, because in the country one can't run to the corner for a loaf of bread or a pound of butter, 94 per cent of farm

Section of Country	Rooms to Care For	Stoves to Care For	Kerosene Lamps, per Cent	Percentage	Water to Carry	Distance Feet	Do Own Washing, per Cent	Do Own Sewing, per Cent	Bread, Baking, per Cent	Women Caring for Poultry, per Cent	Women Help Milk, per Cent	Women Wash Pails, per Cent	Washing Separators, per Cent	Butter Making, per Cent
Eastern States . . .	9.7	1.3	79	54	23	94	86	89	69	24	85	50	43	
Central States . . .	7.7	1.3	79	68	41	97	94	78	89	45	93	76	63	74
Western States . . .	5.3	2.5	77	57	65	97	95	97	84	37	85	63	63	60
Average.....	7.8	1.6	79	61	39	96	92	94	81	36	88	65	60	

A glimpse of what the farm woman actually does—as found in a recent Government survey of farm conditions. Every farm electric dealer may well study the table, and study it again—and then resolve that,

in his territory at least, the overworked farmer's wife will have as much to say about the installation of a new electric plant as the farmer himself. And in not a few cases her vote will decide.



Yes, it's "junk" now, but before electricity was installed in this particular farmhouse, the washboards, wringers and oil lamps here shown played an important part in one farm woman's daily life. They mean only hours of hard, disagreeable work to the farm wife, and it's the exceptional farm woman who is not looking forward to the day when she can "junk" her instruments of torture, too.

women make their own bread and 60 per cent their own butter.*

In the city, running water is a convenience one appreciates only when the pipe freezes; in the country, many women still carry buckets of water—ten buckets a day, or 45 tons of water a year!

In the city, the multiplicity of convenient stores has almost made sewing a lost art in the home; in the country, 95 per cent of farm women do their own sewing.

In the city, the midday lunch, with its tasty snatches of left-overs from the day before, is often a welcome respite for the housewife (sometimes no less from her husband, perhaps, than from her household tasks). On the farm, the heavy midday dinner not only for the farmer husband but for all the hungry farmhands is another of the burdens falling on the farm wife.

These are only a few of the thoughts in back of the farm wife's mind when she hears the words "labor savers." The electric bread mixer is much more real as a labor saver to a woman who *must* make her own bread, or do without. The electric sewing machine; the fireless cooker; the iceless refrigerator; the motor-driven churn; the washing machine, the iron, the vacuum cleaner; the electric milking machine, cream separator and bottle washer; these are all associated in her mind with tasks that are necessary, not optional. Like the pockets in a man's coat, they are conveniences that became necessities even before they were invented.

*These and other statistics quoted in this article have been taken from a report of the extension work division of the U. S. Department of Agriculture, which recently completed a farm home survey covering ten thousand representative farms in the Eastern, Central and Western States.

It is the misfortune of the farm woman that she has never been considered frivolous. If she were, doubtless, she would not now be lacking the labor-saving devices she so vitally needs. However that may be, we'll wager it is far easier to sell her an electric curling iron than a toaster or percolator! You'll see more evidences of curl-papers in a week in the country than in a month in town. The farm woman may be a wonder, judged solely on her day's work, but it takes positive genius to do what she does in the way of frizzing up for, say, the Friday evening social at the church. There's no finer type of woman in the world than the intelligent American farm woman—but don't forget she is a farm woman. Her instincts are in the main identical with those of her city-bred sister—and her needs are greater. To her, the electric curling iron, vibrator and

hair drier come not only as aids in keeping "up to the mark" despite the heavy pressure of farm tasks, but also as symbols of the little personal refinements which, in her imagination, she associates with city life.

Quite another reason dictates her interest in the heating pad and other semi-medical electrical equipment. Because a sick call usually means a ride of from three to ten miles for the nearest doctor, and even further for the nearest nurse, the farm wife has come to depend on home treatment for most of the minor ailments in the family. The electric warming pad, immersion heater, radiant heater, violet ray outfit and therapeutic lamp are necessary aids, then, in her eyes, in guarding the family health.

Probably the highest service that the home demonstration agents and various agricultural college extension workers are doing is giving the farm woman her first broad view of her relation to the community and general welfare of the country; in turning her eyes from her own narrow circle of household routine to the bigger task of making the farmstead and farm life attractive to her children. "Better farm homes, and the boys and girls will stay on the farm," is the cry of these workers. The farm woman's mind is opened, her emotions have been aroused. She is prouder of her job than she has ever been before. And she is keenly searching for the things that will release her from drudgery, and give her time for the duties she is learning to realize are more important.



Farm women are quite as interested as their husbands in learning what electricity can do for them on the farm. Here is a farm electric plant demonstration to which they have driven in, with their husbands,

from miles around. Successful farm dealers consider it quite as important to reach the women folks as the men, in getting farm electric plants sold—and in many instances to reach the farm wife *first*.

Getting the Church Clubs Interested in the "Home Electric" Idea

Labor-Saving Appliances Give Women More Time for Church Work, Pastors Find—Hence Their Willingness to Aid in Electrical "Lecture Service" or Other Educational and Co-operative Plans

By LIDDA KAY



A tea room where tea and toast were both made electrically was a popular corner at a recent bazaar in a New Jersey church. The tables were attractively set with small boudoir lamps and electric toasters. One of the women made tea in an electric samovar and served it to visitors with bread

and butter, the visitor then toasting the bread at her own table. The electric company which broached the idea to the church felt amply repaid for its efforts. Every church offers opportunities like this to the live electrical dealer. The church is the nucleus of the social life of any community

—its busiest workers are housewives of the type most interested in modern labor-saving methods in the home. Reach them in groups—through helpful co-operation like this—and the effort will be repaid many times over. It requires tact and a sincere desire to serve—but it can be done.

CAN the church, too, be enlisted as an ally in further spreading a knowledge of the happier living conditions electricity may bring to the home?

Electricity is not yet the household word that it will be—some day. And until that day comes—when people will think of household work in terms of electricity as naturally as they now think of it in terms of hand labor—until that day comes, every electrical man must look upon his share in the further education of the public as a vital part of his merchandising policy.

His comprehensive understanding of the social structure of his community will have much to do with his success in dealing with it. Even the smallest town creates its net-

work of social organization. And every ramification of it—church, school, social club, business organization—will be used by the alert electrical man as simply another avenue to the fuller education of his community to the "home electric" idea and the electrical idea generally.

In any social structure, the church is usually the nucleus. It is a beehive of constant activity, its busiest workers being housewives and home-makers of the type most interested in modern labor-saving methods in the home.

A comprehensive plan for reaching the various organizations and members of churches has been worked out by the Philadelphia Electric Company, under the direction of Miss Gertrude H. Shearer. Under

this plan, a "lecture service" is provided for all church and social organizations of the city that care to avail themselves of it. Church organizations and clubs are always searching for ideas for an evening's entertainment, and when that entertainment takes the form of free "movies" and an informal talk on electrical housekeeping the attendance is sure to be large.

An "Electrical Entertainment" for a Church Club

A typical program given by Miss Shearer recently, for one of the church clubs, was as follows: 8 p.m., community singing; 8:15, film, "The King of the Rails"; 8:45, a practical lamp demonstration; 9:00, film, "Jim Blank and the Magic Spark"; 9:08,

"THE BENEFACTOR"

The life of Thomas A. Edison. A fascinating picture of the pluck and determination of America's greatest inventor.

"JIM BLANK AND THE MAGIC SPARK"
MOTION AND STEREOPTICON PICTURES

with a Brief Talk by
GERTRUDE H. SHEARER
of The Philadelphia Electric Company
on

"THE MAGIC BUTTON"

Auspices

Ethelda Bible Class—Siloam Methodist Episcopal Church
Northwest corner 70th Street and Woodland Avenue

Tuesday Evening, October 5th, 1920—8 o'clock SHARP

Admission Twenty Cents Benefit Building Fund
Children under 12 please sit with their parents

"CUBA, THE ISLAND OF SUGAR"

Showing the world's greatest achievement in the sugar industry, also many scenes in and about the beautiful old city of Havana

"A SQUARE DEAL FOR HIS WIFE"

Adventures of a business man who dabbles in housekeeping
ENTERTAINING MOTION PICTURES INSTRUCTIVE

with a brief illustrated talk
"ELECTRIC SERVICE: What It Means to You"
By GERTRUDE HARRIET SHEARER
of The Philadelphia Electric Company

Auspices Church Welcome Committee and Decoration Guild

P. E. CHURCH of the GOOD SHEPHERD

Parish House—E. Cumberland and Collins Streets

Thursday evening, May 27th, 1920—8 o'clock SHARP
Admission—Twenty Cents COMMUNITY SINGING

Here are two typical program cards for church entertainments given by Miss Gertrude Shearer of the Philadelphia Electric Company. Electrical movie films are had

for the asking, from the manufacturers, and are regarded as a real treat by the audience. Thousands of church members have been reached in this way by the Philadelphia

Electric Company, and have had their half-formed notions of electrical service transformed into a definite desire and enthusiasm for the "home electrical."

an illustrated talk by Miss Shearer on "Electric Service—What It Means to You"; 9:30, film, "A Square Deal for His Wife." A wired table at the foot of the platform held a display of appliances which the audience inspected after the program.

To keep in touch with church organizations, Miss Shearer keeps a card index file, where the name of the church and all needed data may be instantly referred to. Information recorded includes, for each church, the name of the pastor, organizations and their officers, date

when the lecture or entertainment was provided, the attendance, and the films presented. Besides this, the newspapers are watched carefully for announcements of gatherings, letters then being sent to the chairmen suggesting the educational entertainment.

Once a lecture is arranged for, it is widely advertised through tickets and posters which are supplied by the manufacturers whose films are being used. The church calendar or magazine also does its bit to advertise the event. To insure a

smooth running performance, the electric company supplies the machine and operator for showing the films.

Gain the Pastor's Support!

In the beginning, before any of the organizations are approached and to gain the support of the pastor of the church, Miss Shearer writes to the pastor, explaining the purposes of the lecture service. A card is inclosed with the letter upon which the pastor is asked to write the names of the presidents, and the membership, of the organizations of his church. After this, the organizations heads themselves are approached.

"The average minister is always interested in raising funds for his church," says Miss Shearer, "and as the church organizations frequently charge small admission fees for the entertainment, our lecture service offers a welcome means to augment their treasures. When the pastor does object to a plan, it is either because other features crowd it out or because he regards it as a commercial and advertising endeavor on our part rather than an educational measure. But with testimonials from other churches and a little salesmanship—eight times out of ten—he can be won over."

"In a small town, where a dealer is likely to be known by the clergyman, it ought not be so difficult for him to persuade the man whose business it is to 'do good' that he (the dealer) is to a certain extent in the same line; that a happy home is largely dependent upon the disposition of its occupants and that comforts and convenience, when had at



At the New Jersey church bazaar, the electric company also had an electric booth, displaying a glittering array of appliances and lamps. Needless to say, it was the center

of attraction among the familiar fancy booths and candy and cake tables. Under an arrangement with the bazaar committee, a percentage of all sales went to the church.

a reasonable cost, go a long way toward making that home happy.

"Besides, leisure for the housewife due to labor-saving equipment means more time for that housewife to go to church. Any minister knows that, and it is an argument that will appeal to him. With an automatic electric range in the home of every one of his parishioners, his church wouldn't have room enough for the womenfolks Sunday morning!"

Speaking of the possibility of a similar co-operation with the churches being undertaken by the local electrical fraternity in other cities throughout the country, Miss Shearer says:

"Yes, I have been thinking quite seriously about this plan, as it might affect dealers. In a small town, where there is only one electrical dealer, I see no reason why he could not tackle the problem himself, even though there be four or five churches. But in a larger town, if a number of dealers were to combine in financing such a service, I believe they would find it profitable to employ a woman to organize and carry on the work, representing the entire group."

Have an "Electric Tea Room" at Your Church Bazaars

The Public Service Company of Newark, N. J., also furnished an example recently of how an electric company can co-operate with a church, to their mutual advantage. The church was planning to hold a bazaar in the Sunday school rooms, and the electric company easily won the consent of the pastor and bazaar chairmen to arrange a unique little tea room at the bazaar. The tables were attractively set with small boudoir lamps and electric toasters. At a separate table one of the women made tea in an electric samovar and served it to visitors with bread and butter, each visitor then toasting the bread at her own table. The idea "took" instantly, and made the tea room one of the most popular corners at the show. Needless to say, it both added considerably to the bazaar receipts and initiated many of the women into the convenience of the electric toaster.

At the same bazaar, the company also had an electric booth with a glittering array of appliances and lamps. Under an arrangement with the bazaar committee, a certain percentage of all sales made went to the church.

Put Your Nameplate on Appliances You Sell

The advertising value of the appliance in the home is often overlooked by the contractor-dealer who fails to attach his name in any way to the goods which go out from his store. Electrical appliances are often gifts, so that the person who handles them in daily use is not the one who purchased them. In this case particularly there is no way of the store which sold the goods receiving the advertising benefit of its display to admiring neighbors. The housewife always tends to turn to the establishment from which the goods were purchased in the case of any necessary repairs, but if she does not have this information the dealer loses an opportunity of cementing a

firm relationship which may lead later to other purchases. Keep your name before a prospect, and the prospect will have your name in mind when she decides to buy.

In order to secure the full value of the advertising which each large appliance in the home carries with it the Garden City Electric Company has had made a neat brass nameplate which is attached to the larger appliances when sold. This in no way injures the appearance of the article and is welcomed by the customer as a convenient reference in the case of future dealings in regard to the object in question.

This store has recently doubled its floor space and has taken an important part in the growing electrical trade of the San José district of California.

Building Good Will for the Utilities

Will your town stop or move ahead?

This is the simple fact. The United States needs more electricity to run its mills and mines, to light its streets and houses, to lighten the labor of the home, to increase production and to lower costs.

THREE are 5,000,000 homes within reach of electricity waiting to be wired. The use of electricity for washing, ironing, sweeping and cooking has hardly more than begun.

Nearly every electric light and power company knows that it must expand tremendously in the next four years if it is to keep up with the demand. Figures taken from Electrical World indicate that the equipment of these companies will have to be nearly doubled; and that means an additional investment not of millions, but of approximately 4 billions of dollars.

We Can Speak Frankly About This, Having No Axe to Grind

ELCTRICAL WORLD is not owned by the electric light and power companies. It is an independent property, one of the eleven journals of service published by the McGraw-Hill Company, Inc., New York. It is in a position to speak frankly both to its industry and for its industry

It has spoken frankly to the electric light companies for years. It has said: "Give service; give better and better service; take the public into your confidence all along the line."

And what the electric light companies have done is hardly short of miraculous. You seldom stop to think of it. You touch a button and the light goes on, or the motor starts—a light that has been made constantly better and cheaper in the

past twenty-five years when everything else was costing so much more; a motor that does the work of a hundred or five hundred men.

The miracle of that light or motor has become a commonplace part of your life; but it is a miracle none the less.

The electric light companies have a right to be proud of it; and Electrical World can boast of it, even though the companies do not.

Power Supply—the Key to Progress

AND now ELECTRICAL WORLD turns from its readers to the readers of Collier's: from the men who own and operate the electric lighting companies, to their customers, to you and says:

"The time is here when all of us must do well by our electric light and power companies if we want to do well by ourselves.

"Four billions in new capital can come only from the little savings of the many; and the companies must have this new capital or the nation will be stopped in its progress because it has outgrown its power and its lights.

"Take a good look ahead at your city or town. Is it going to move forward swiftly or stumble and halt? The answer lies in the steady growth of your electric light and power company, as much as any where else. For no city moves forward unless it can see clearly and has all of the power it can use."

ELECTRICAL WORLD

by *James H. McGraw*

President

McGraw-Hill Company, Inc.
Tenth Avenue at 36th Street
New York City

Collier's Itself Said:
"Our public and our utilities will have to pull together to meet the present. They will not prosper separately."

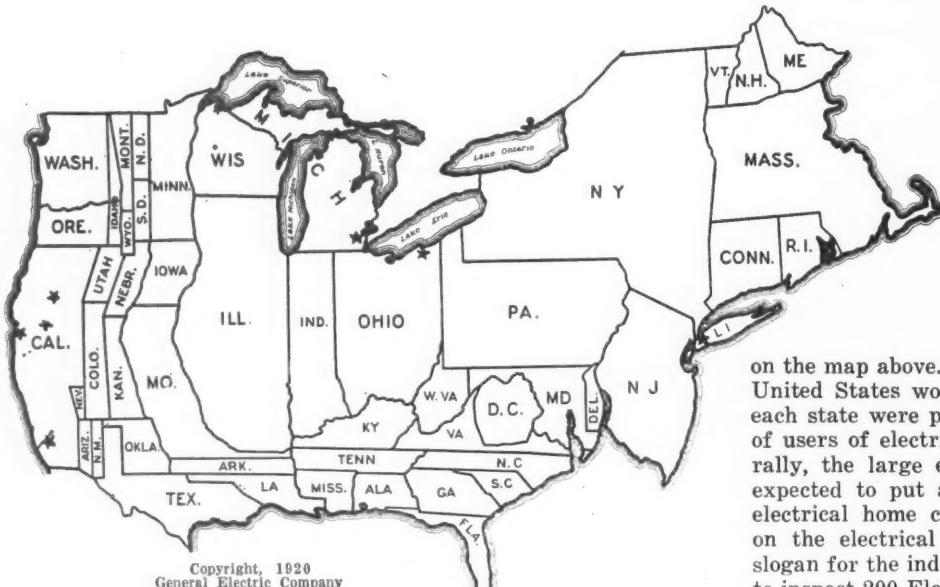
ELCTRICAL WORLD, ELECTRICAL MERCHANTISING and JOURNAL OF ELECTRICITY AND WESTERN INDUSTRY are read by 42,000 men of the electrical industry. OTHER McGRAW-HILL publications are: McGRAW-HILL'S AUTOMOBILE ENGINEER and MOTORING JOURNAL, CHEMICAL AND METALLURGICAL ENGINEERING, ELECTRIC RAILWAY JOURNAL, ENGINEERING NEWS-RECORD, and INGENIERIA INTERNACIONAL (Spanish).

Public confidence must reside in the electric light and power utilities if they are to go forward healthily. In other words, the utilities must have friends. Other branches of the electrical industry are therefore spending money to buy advertising space valued at a quarter of a million dollars to make friends for the electric light and power companies. National magazines, the technical press, newspapers, folders—all are being used in some way to

tell effectively the good-will story. This campaign is being directed by the National Electric Light Association as the major part of its national good-will program. The illustration shows how the McGraw-Hill Company, publishers of *ELECTRICAL WORLD* and *ELECTRICAL MERCHANTISING*, is using full pages in *Collier's* as a part of the utilities' good-will campaign. The above advertisement appeared April 9. Its message means much to every electrical man.

Is Your City on the "Home Electrical" Map?

"Two Million People to Inspect 200 Electrical Homes in 1921"



Copyright, 1920
General Electric Company

IS YOUR CITY
on the "home electrical" map? Home
electrical campaigns—in which a fully wired
and equipped home is
opened to the public
for electrical educational purposes—have
been put over or are
now getting under
way in the cities
which are "starred"
on the list below and

on the map above. This map shows how the
United States would appear if the area of
each state were proportional to the number
of users of electricity in that state. Natu-
rally, the large electrical states should be
expected to put across a large number of
electrical home campaigns. Get your city
on the electrical map—and remember the
slogan for the industry, "Two Million People
to inspect 200 Electrical Homes in 1921."

CITIES OF OVER 100,000 POPULATION

Akron, Ohio	208,435	Alton, Ill.	24,714	Haverhill, Mass.	53,884	Passaic, N. J.	63,824
Albany, N. Y.	113,344	Altoona, Pa.	60,331	Hazelton, Pa.	32,287	Pawtucket, R. I.	64,248
Atlanta, Ga.	200,616	Amsterdam, N. Y.	33,524	Highland Park, Mich.	46,599	Peoria, Ill.	76,121
Baltimore, Md.	733,826	Anderson, Ind.	29,767	Hoboken, N. J.	68,186	Pensacola, Fla.	31,035
Birmingham, Ala.	178,270	Atlantic City, N. J.	50,682	Holyoke, Mass.	60,203	Perth Amboy, N. J.	41,707
Boston, Mass.	747,923	Auburn, N. Y.	36,142	Honolulu, Hawaii	83,327	Phoenix, Ariz.	29,053
Bridgeport, Conn.	143,152	Augusta, Ga.	52,548	Huntington, W. Va.	48,000	Pittsfield, Mass.	41,534
Buffalo, N. Y.	505,875	Aurora, Ill.	36,265	Irvington, N. J.	25,466	Plainfield, N. J.	27,700
Cambridge, Mass.	109,450	Austin, Tex.	31,150	Jackson, Mich.	48,374	Pontiac, Mich.	34,273
Camden, N. J.	116,309	Bangor, Me.	25,948	Jacksonville, Fla.	91,543	Port Huron, Mich.	23,944
Chicago, Ill.	2,701,212	Battle Creek, Mich.	36,164	Jamestown, N. Y.	38,898	Portland, Me.	69,196
Cincinnati, Ohio	401,247	Bay City, Mich.	47,554	Johnstown, Pa.	67,327	Portsmouth, Ohio	33,011
Cleveland, Ohio	796,836	Bayonne, N. J.	76,754	Joliet, Ill.	38,372	Portsmouth, Va.	54,387
Columbus, Ohio	237,031	Beaumont, Tex.	40,422	Joplin, Mo.	29,855	Poughkeepsie, N. Y.	35,000
Dallas, Texas	158,976	Bellingham, Wash.	25,570	Kalamazoo, Mich.	48,858	Pueblo, Colo.	65,000
Dayton, Ohio	153,830	Berkeley, Cal.	55,886	Kearny, N. J.	26,724	Quincy, Ill.	40,000
Denver, Colo.	256,369	Bethlehem, Pa.	50,358	Kingston, N. Y.	25,884	Quincy, Mass.	47,611
Des Moines, Ia.	126,468	Binghamton, N. Y.	66,800	Knoxville, Tenn.	77,818	Racine, Wis.	58,593
*Detroit, Mich.	993,739	Bloomington, Ill.	28,638	Kokomo, Ind.	30,067	Raleigh, N. C.	24,418
Fall River, Mass.	120,485	Brockton, Mass.	66,138	La Crosse, Wis.	30,363	Revere, Mass.	28,823
Fort Worth, Texas	120,000	Brookline, Mass.	37,748	Lakewood, O.	41,732	Richmond, Ind.	26,728
Grand Rapids, Mich.	137,634	Butte, Mont.	41,611	Lansing, Mich.	53,150	Roanoke, Va.	50,842
Hartford, Conn.	138,036	Canton, Ohio	87,091	Lancaster, Pa.	57,327	Rockford, Ill.	65,651
Houston, Texas	138,076	Cedar Rapids, Ia.	45,566	Lawrence, Mass.	94,270	Rock Island, Ill.	35,177
Indianapolis, Ind.	314,194	Charleston, S. C.	71,500	Lewiston, Me.	31,707	Rome, N. Y.	26,341
Jersey City, N. J.	297,864	Charleston, W. Va.	39,608	Lexington, Ky.	41,534	*Sacramento, Cal.	65,857
Kansas City, Kan.	101,078	Charlotte, N. C.	46,318	Lima, Ohio.	41,306	Saginaw, Mich.	61,903
Kansas City, Mo.	345,000	Chattanooga, Tenn.	57,895	Lincoln, Neb.	54,934	Salem, Mass.	42,515
*Los Angeles, Cal.	575,480	Chelsea, Mass.	43,184	Little Rock, Ark.	64,997	San Diego, Cal.	74,683
Louisville, Ky.	234,891	Chester, Pa.	58,030	Long Beach, Cal.	55,593	San José, Cal.	39,000
Lowell, Mass.	112,479	Chicopee, Mass.	36,214	Lorain, Ohio.	37,295	Savannah, Ga.	83,252
Memphis, Tenn.	162,351	Cicero, Ill.	44,905	Lynchburg, Va.	29,956	Schenectady, N. Y.	88,723
Milwaukee, Wis.	457,147	Clifton, N. J.	26,470	Lynn, Mass.	99,148	Sheboygan, Wis.	30,955
Minneapolis, Minn.	380,498	Col. Springs, Col.	29,572	Macon, Ga.	52,995	Shreveport, La.	43,872
Nashville, Tenn.	118,342	Columbia, S. C.	37,524	Madison, Wis.	38,378	Sioux City, Ia.	71,227
New Bedford, Mass.	121,217	Council Bluffs, Ia.	36,162	Malden, Mass.	49,103	Sioux Falls, S. D.	25,176
Newark, N. J.	415,609	Covington, Ky.	57,121	Manchester, N. H.	78,200	Somerville, Mass.	93,033
New Haven, Conn.	162,390	Cranston, R. I.	29,407	Mansfield, Ohio.	27,824	South Bend, Ind.	70,000
New Orleans, La.	387,408	Cumberland, Md.	29,837	Marion, Ohio.	28,591	S. Omaha, Neb.	40,000
*New York, N. Y.	5,621,151	Danville, Ill.	33,750	McKeesport, Pa.	45,457	Springfield, Ill.	59,183
Norfolk, Va.	115,777	Davenport, Ia.	56,727	Medford, Mass.	38,687	Springfield, Mo.	39,620
*Oakland, Cal.	216,361	Decatur, Ill.	43,818	Meriden, Conn.	29,842	St. Joseph, Mo.	60,840
Omaha, Neb.	191,601	Dubuque, Iowa.	39,141	Miami, Fla.	29,549	Stamford, Conn.	77,735
Paterson, N. J.	135,856	Duluth, Minn.	98,917	Mobile, Ala.	60,124	Steubenville, O.	40,057
Philadelphia, Pa.	1,823,158	East Chicago, Ind.	35,967	Moline, Ill.	30,709	Stockton, Cal.	28,504
Pittsburgh, Pa.	588,193	E. Cleveland, O.	27,292	Montclair, N. J.	28,810	Superior, Wis.	40,296
Portland, Ore.	258,288	Easton, Pa.	33,813	Mt. Vernon, N. Y.	38,500	Tacoma, Wash.	39,624
Providence, R. I.	275,000	Erie, Pa.	93,372	Montgomery, Ala.	43,464	Tampa, Fla.	.96,965
Reading, Pa.	107,784	E. Orange, N. J.	50,587	Muncie, Ind.	36,524	Taunton, Mass.	51,252
Richmond, Va.	158,700	E. St. Louis, Ill.	66,740	Muskegon, Mich.	36,570	Terre Haute, Ind.	37,137
Rochester, N. Y.	295,850	Elgin, Ill.	27,431	Muskogee, Okla.	40,000	Topeka, Kan.	65,914
St. Louis, Mo.	773,000	Elizabeth, N. J.	95,682	Nashau, N. H.	27,500	Troy, N. Y.	50,022
St. Paul, Minn.	234,595	Elmira, N. Y.	45,305	New Britain, Conn.	59,316	Tulsa, Okla.	78,000
San Antonio, Texas	161,308	El Paso, Tex.	83,836	Newark, Ohio.	26,718	Utica, N. Y.	72,075
*San Francisco, Cal.	508,410	Erie, Pa.	93,372	Newburgh, N. Y.	30,272	Warren, Ohio.	94,136
Scranton, Pa.	137,783	Evanston, Ill.	37,215	Newcastle, Pa.	44,938	Waltham, Mass.	27,050
Seattle, Wash.	315,362	Evansville, Ind.	85,264	New London, Conn.	25,688	Watertown, N. Y.	30,891
Spokane, Wash.	104,204	Everett, Mass.	40,109	Newport, Ky.	29,317	Waterbury, Conn.	91,410
Springfield, Mass.	129,388	Everett, Wash.	27,614	Northport, R. I.	30,255	Waterloo, Iowa.	36,230
Syracuse, N. Y.	171,647	Fitchburg, Mass.	41,013	Newport, News, Va.	35,596	Watertown, N. Y.	31,263
Toledo, Ohio	243,109	Flint, Mich.	91,599	Newton, Mass.	46,054	W. Hoboken, N. J.	40,068
Trenton, N. J.	119,289	Fort Smith, Ark.	28,811	Niagara Falls, N. Y.	50,760	W. New York, N. J.	29,926
Washington, D. C.	437,571	Fort Wayne, Ind.	86,549	Norristown, Pa.	32,319	Wheeling, W. Va.	54,322
Wilmington, Del.	110,168	Fresno, Cal.	44,616	Norwalk, Conn.	27,557	Wichita, Kan.	72,128
Worcester, Mass.	179,741	Galveston, Tex.	42,000	Norwich, Conn.	29,685	Wichita Falls, Tex.	40,079
Yonkers, N. Y.	100,226	Gary, Ind.	55,344	Oak Park, Ill.	39,830	Wilkes-Barre, Pa.	73,828
Youngstown, Ohio	132,358	Green Bay, Wis.	30,000	Odgen, Utah.	32,804	Williamsport, Pa.	36,198
CITIES FROM 25,000 to 100,000 POPULATION		Hagerstown, Md.	28,029	Oklahoma City, Okla.	91,258	Wilmington, N. C.	33,372
Alameda, Cal.	28,806	Hamilton, Ohio.	39,675	Orange, N. J.	33,239	Wins'n-Salem, N. C.	48,395
Allentown, Pa.	73,502	Hammond, Ind.	36,004	Oshkosh, Wis.	33,162	Woonsocket, R. I.	43,496
		Hamtramck, Mich.	48,615	Harrisburg, Pa.	45,334	York, Pa.	47,499
						Zanesville, Ohio	29,569

"Home"—the Master Sales Appeal

All Shelters Are Not Homes — Therefore the California Electrical Co-operative Campaign
Conceived the Idea of Educating People to Realize that Electrical Convenience
Is the Mother of Comfort, for Convenience and Comfort Are
Necessary in Making a Home Out of a House

By VICTOR W. HARTLEY
Of the California Electrical Co-operative Campaign

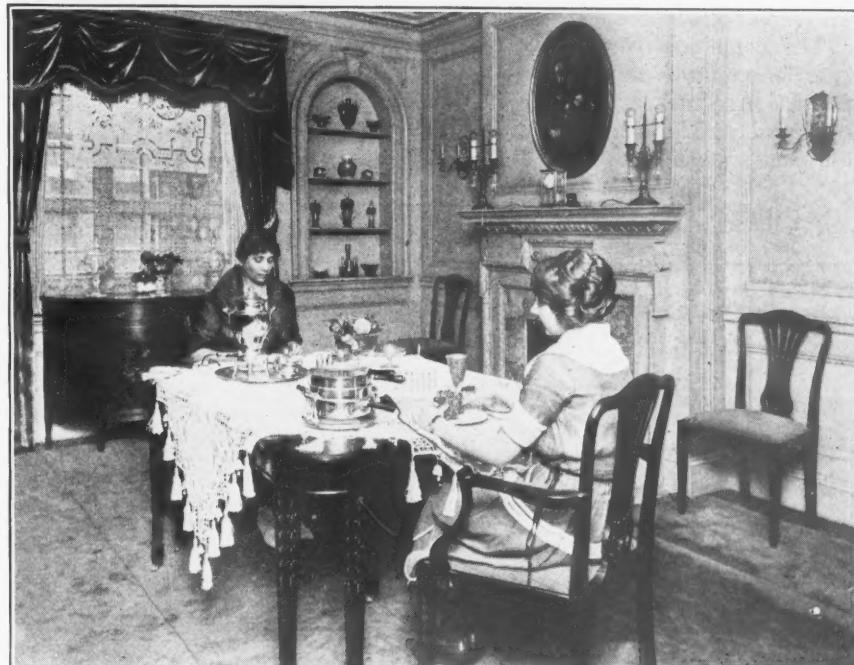
HOME! There is your selling appeal. Whether it be "Let me build you a home," "Let me beautify your home," or "Let me electrify your home," that word "home" carries a universal appeal that leads to sales. Every one has, or hopes some day to have, a home; every home owner is your potential customer.

It doesn't matter whether you are selling electricity, electric appliances, or popcorn—if you just hammer, hammer, hammer at the "home" idea you are clearing a trail right into the hearts of the readers of your advertisements whether they are dwellers in mansions, or in one room and kitchenette, or are delicatessen-dinner clerks.

With this purpose in view the California Electrical Co-operative Campaign conceived the idea of educating the people to realize that all shelters are not homes. There is one vitally essential quality which distinguishes the home from the residence. It is Convenience—the mother of comfort.

Build a vast mansion and surround its occupants with the costliest of luxuries—but if the dwellers must climb two flights of stairs to answer the telephone or stand shivering in line each morning to await their turn in one bathroom, it would not be "home." Rather would a dilapidated hovel, neatly kept and conveniently arranged, truly justify that word.

"Conveniently arranged"—that is the point. And that in the modern home convenience is synonymous with electricity is being forcefully emphasized in the campaign activities through public exhibitions of the "Modern Electrical Home." The first four of these exhibits, conducted by the California Electrical Co-operative Campaign, revealed to approximately 80,000 prospective purchasers of electrical supplies how their home



Not all "home electric" dining rooms are in California. This electrical dining room was designed by the Society for Electrical Development and opened for the inspection of the public in Brooklyn, N. Y. Under the direction of Miss Grace Hadley, of the society, table appliances, wall brackets,

electric candlesticks and overhead lighting were so chosen and arranged that they harmonized with the other furnishings effectively. Perhaps even California can profitably exchange ideas with New York, when it comes to arranging and exhibiting electrical homes.

should be wired. In a fifth establishment—the adobe electrical home in Los Angeles—approximately 75,000 visitors were shown the conveniences of this ideal home.

In other words, the public, some 150,000 representatives of it, have been rendered a genuine service, at the same time that the electrical industry has been gaining friends who are potential customers. These guests have all learned, to their own advantage, what a vast difference wiring makes in the convenience of the home and will, after comparison with the old wiring methods, demand that the modern electrical home be emulated in order that they may take full advantage of the appliances.

Every one of these visitors was surprised to learn what a versatile

servant electricity is, and to how many appliances it can be harnessed. Further, and equally as important, it was impressed upon these guests that the predominating convenience of the home they were visiting was the fact that wherever there was an appliance to be used there was a convenience outlet to receive the plug. No light bulbs need be removed; nor was the beauty of the room marred by unsightly fixture cords.

Co-operation, the soul of the campaign, was vitally necessary to the success of the "Modern Electrical Home," and co-operation put these homes across on a big scale. First there was the real estate agent to be sold the idea, and in each instance the proposition was taken up with the agent for the most modern and

popular tract in the city. Each of these agents was convinced that the home would be a big drawing card and advertising for his tract and each consented to build a house, letting the Co-operative Campaign supervise the wiring. Upon completion of the building, furniture dealers sent their interior decorators and converted it into a home ready to be moved into at a moment's notice. The electrical dealers finished the job by solving the servant question. They supplied the appliances—the many fingers used by this great, ever-present servant in the efficient performance of its duties.

The home was then ready for inspection and was thrown open to the public. Are the people interested in electrical appliances, and in letting electricity do their work? They are. And it is no idle curiosity which lures them to a "home electric,"

for, in every instance, the homes have been off the beaten path of every-day travel; have been located where a special trip was necessary and only a sincere interest in the exhibit would incur a visit.

These guests were shown through a model home in its entirety, equipped as it was with its many electrical appliances for heating, cooking, lighting, cleaning, cooling and washing, besides the many little conveniences in the bedroom, sick-room, bathroom and boudoir. As each appliance was remarked upon attention was called to the fact that the great factor in its suggestion of comfort was the convenience with which it could be plugged into a near-by outlet.

Tangible and concrete are the results which this work has accomplished. Purchasers of homes are becoming educated to demand con-

venience outlets, contractors are securing larger wiring jobs, dealers are selling more appliances.

It is generally conceded by electrical contractors doing residence work in southern California that, on an average, residences have 25 per cent more outlets installed today than one year ago.

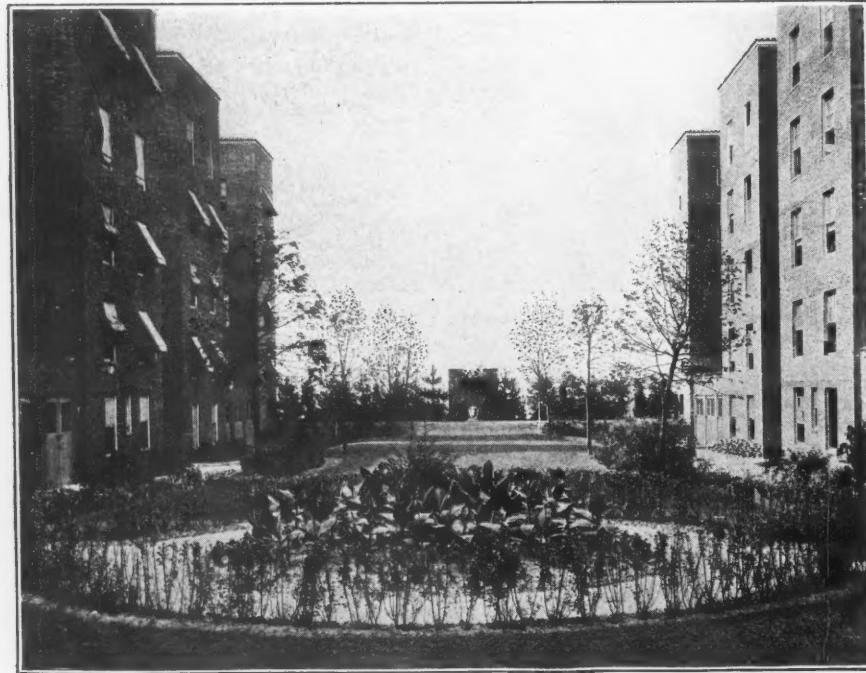
In San Francisco, in the early part of last year, a survey was made of the houses being built in the Westwood Park section of the city and it was found that an average of about two convenience outlets was being installed in each, and in December a survey was made of the same tract and it was found that the new houses are now being equipped with from five to seven outlets.

Upon completion of the wiring of the electrical home in San Francisco the builders, who are the owners of that particular tract, called in all specifications for homes in process of construction and stated that all homes in the tract would be wired along the lines suggested by the architectural expert of the Co-operative Campaign.

Similar action was taken by the builder of the Sacramento "Electrical Home," who found the idea so successful from his point of view that he is wiring all of his houses for the use of electrical appliances. He had already built ten houses in his tract before the "Electrical Home" was constructed. A delegation of the owners of these homes called upon him and insisted that their houses be wired as completely as the "Electrical Home," and arrangements were made for their rewiring. During the time the home was open, and since that time, the contractors noticed, they stated, a demand for more convenience outlets in Sacramento, and the dealers have experienced an increase in their appliance sales at a time when business threatened to be particularly dull.

It is the "home" idea that is putting this work over—it is the "home" idea, rather than the labor-saving qualities of electrical appliances. Do many happy housewives take advantage of the near-by delicatessen's steam-table rather than go to the trouble of preparing dinner? No, women would do things the long way and the hard way if that were the "homy" way; but here we have the powerful sales punch of the quick way, the clean way, and the easy way being co-ordinated in that great human appeal—the "home" way.

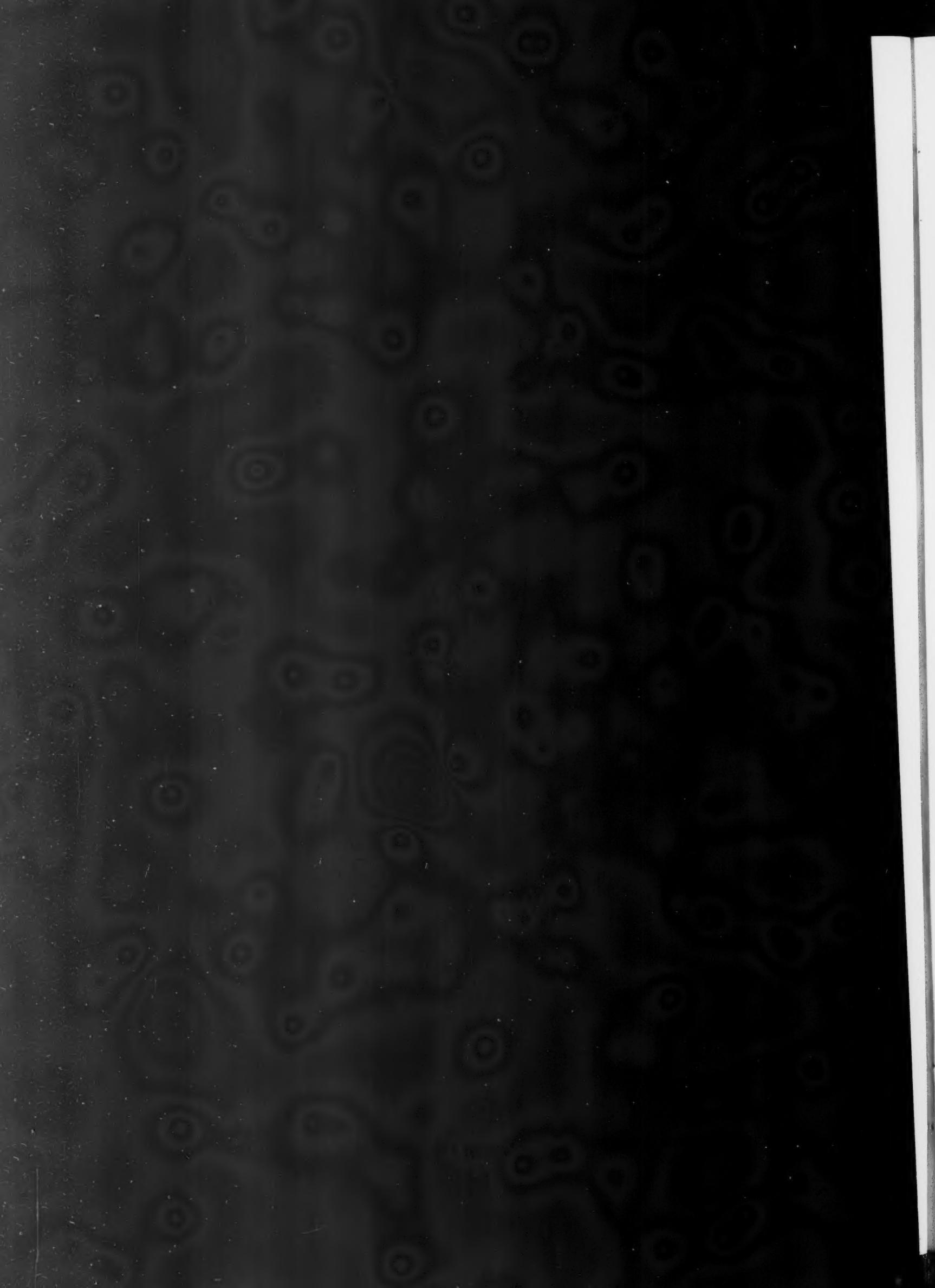
An "Electric Servantless Apartment" to Show New York's Cliff Dwellers the Electric Way



Acting upon a suggestion from the editors iron, grill, electric egg beater and mixer. In the front bedroom—electric heating pad, vibrator, curling iron, radiator and bedside lamp. In the rear bedroom—electric sewing machine, violet-ray outfit, boudoir electric iron, headlight heater and hair drier. In the nursery—baby milk warmer, miniature electric heating pad, toy electric range (operative), electrically-heated toy steam engine, electric train, electric boat, nursery light and nursery table lamp. In the kitchen—electric range, fireless cooker, dishwasher, cake and dough mixer, refrigerator, washing machine, iron and fans.

This electric servantless apartment is to be kept open for the public's inspection for a number of months. Invitations will be sent out to selected lists and a comprehensive program of newspaper advertising is planned. F. G. Randall is vice-president and sales manager of the Queensborough Corporation and Mrs. Mary Hope Norris is in charge of the electrical apartment.







—And now
the
**“APARTMENT
ELECTRICAL”**

Characteristically, the East decrees that its first “home electric” must conform to the mode of living popular in its greatest metropolis.



New York can do it, too—and the first complete “apartment electrical” in the East (at Jackson Heights, Long Island, but twenty-two minutes from Grand Central Station) is now open for inspection. The compact, over-crowded existence of so many city dwellers in the East gives electricity a peculiarly important role in the apartment. Out at Jackson Heights, however, where the apartment is electric from the range in the kitchen to the toy range for the kiddies, hundreds are learning how electricity, with its gifts of beauty and comfort, and even music (from electric piano and electric phonograph), can transform an apartment into a real “home.”



Portland's Electric Store Beautiful

The handsome new retail shop of the J. C. English Company at Portland, Ore.

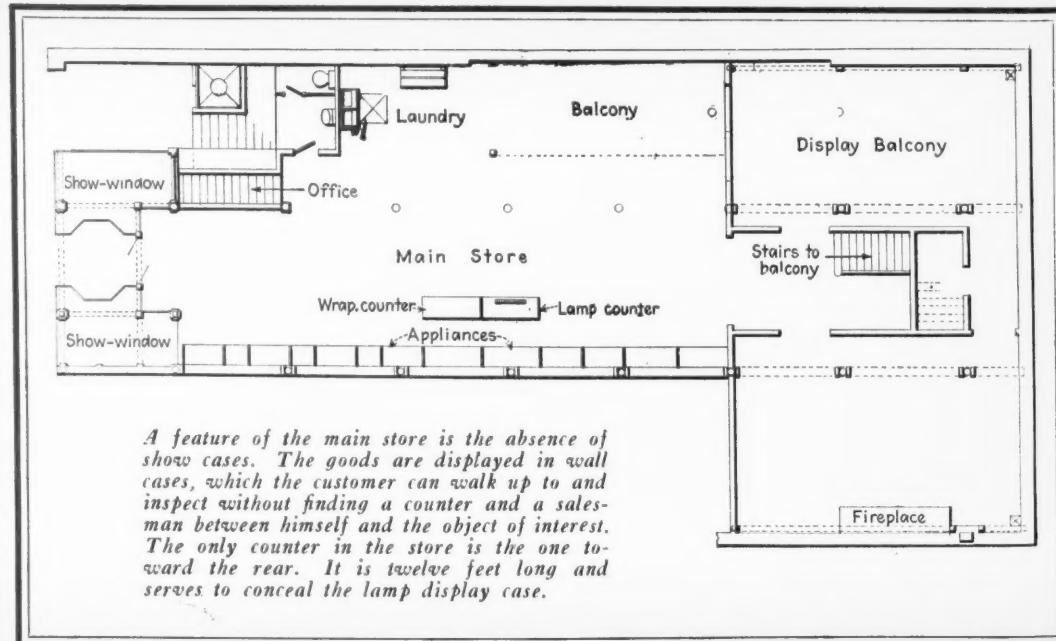
Interiors of dignity and beauty set off the lighting fixtures and appliances offered.



STEPPING from the crowded street into the store of the J. C. English Company, at Portland, Ore., the visitor finds himself in a stately interior in the Tudor style and confronting a vista that centers upon a hall and stairway exactly counterfeiting the hall and stairway of a fine private residence.

This stairway has two objects besides the creation of the Tudor atmosphere. It gives an interesting and unique appearance to the rear of the store, immediately attracting the attention of the entering customer, and it serves to separate the general merchandise display room from the place where better fixtures are segregated.

The lower portions of the wall cases have cupboards, in which are kept the stocks of the merchandise displayed above. The upper portions of the cases have concealed glass doors on the sides, so that the appliances are constantly under glass and do not require perpetual cleaning.



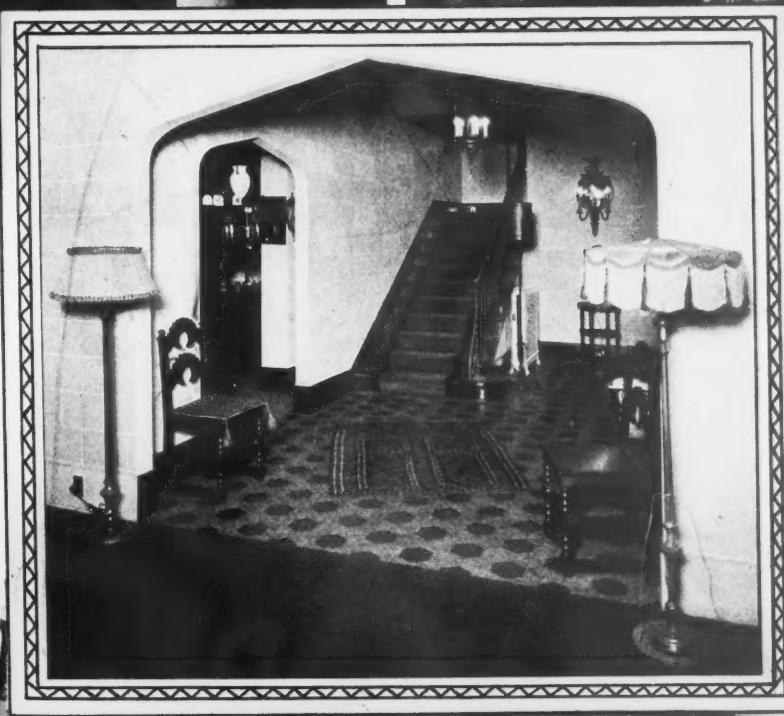
A feature of the main store is the absence of show cases. The goods are displayed in wall cases, which the customer can walk up to and inspect without finding a counter and a salesman between himself and the object of interest. The only counter in the store is the one toward the rear. It is twelve feet long and serves to conceal the lamp display case.



The fixture display rooms are designed to provide a simple and dignified setting for the fixtures, rather than to attract undue attention to themselves by elaborate color schemes or furnishings. The background gives a neutral effect which shows off all fixtures to the best advantage, whether they be iron, gold or polychrome.

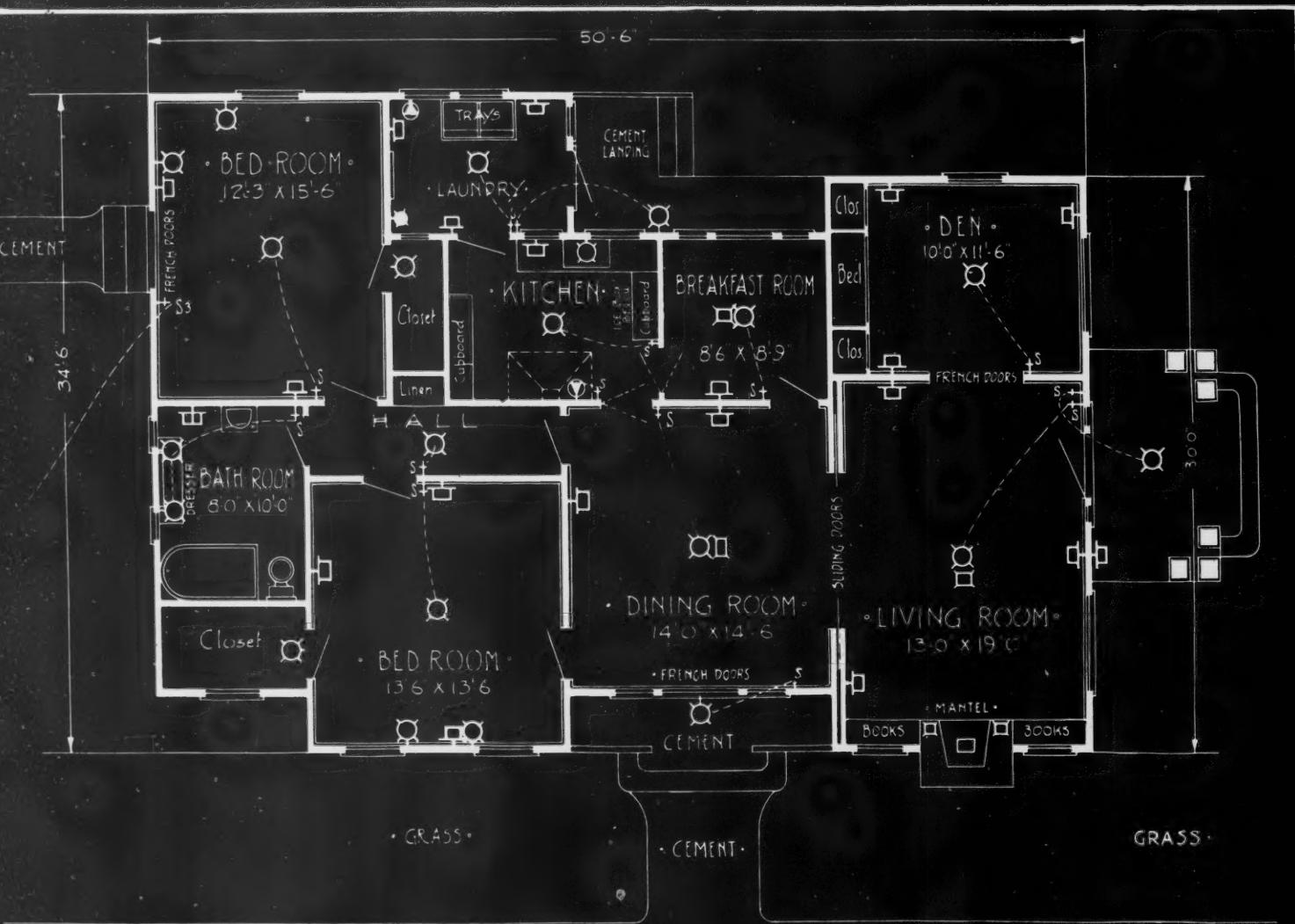


The usual multiplicity of brackets on the walls has been eliminated by mounting the brackets on boards and keeping them in built-in fir cabinets. For a customer's inspection, a bracket can be removed from the cabinet, plugged into a receptacle, and hung on the wall—appearing there as it will look in the customer's own home.



Now They're Building Bungalow Electrical Homes

at Long Beach, Cal.



Of course there is only *one* California (as all Californians will agree) but—there are forty-seven other states, and a few million prospective home builders or owners, that are interested in bungalow homes and in the servicing of these homes. Since a servant is something of a nuisance in a small bungalow, why not substitute electricity for the average temperamental cook or effervescent maid? "Why, indeed!" agrees H. R. Earp, of Long Beach, Cal., and thereupon he buys a bungalow "electrical home," the plans for which (here shown) are full of suggestion for other home builders or owners.

WIRING SYMBOLS

- CEILING LIGHT
- WALL BRACKET
- SERVICE OUTLET
- \$ SWITCH
- FLOOR PLUG
- GAS OUTLET
- HEAT AND POWER OUTLET





The Architect's Aid Is Essential

in Developing the Home Electrical

Based on an Interview with
W. H. RATCLIFF, Jr.*
 Architect

WHEN an architect designs a home he faces a problem entirely different from that involved in the planning of an office building, a church or a monument. In the case of the church or office building he usually has to deal with a committee, or with some company or individual whose primary interests center around various commercial considerations such as floor space and economical heating. The committee and the company consult the architect, ask his advice, and usually take it.

The home builder presents an entirely different problem. He has certain definite ideas, and he comes to the architect to have them worked out. The element of personality is the determining factor, and the architect becomes both an instrument and a designer. As he is able to understand his client and to make the home express the client's personality, in so far is he truly successful.

In planning a church, an architect familiar with church architecture can lay down the law, saying this must be thus and so. There is a way in which the work should be done, and the architect knows this better than the committee. In the planning of a home the architect is a partner, not a dictator. The subject is far more complex, as is any question which involves the human equation, and he must analyze, interpret, suggest and guide with an attitude entirely different from that adopted in other work.

In home building there is a tremendous variation in the types the architect is called upon to satisfy, not only as to taste but as to pocket-book. He makes suggestions, including outlines of adequate electrical equipment, but these have to be worked out in co-operation with the client, rather than planned arbi-

trarily to conform to any theoretical standard of perfection. Nevertheless, in this respect too, the architect has a great part in the education of the public, even though he cannot lay down the law as in the case of public buildings. The great majority of the architects keep abreast of developments and stand ready to co-operate to the fullest extent in carrying out the most modern ideas in home building.

Planning Lighting Effects

The type of work handled depends very largely on the individual architect. A prominent California

and baseboard outlets, especially in the living rooms. This necessitates careful planning of outlets, both as to number and location, in order that every need may be served, and that possible rearrangements of furniture do not put the lighting scheme out of commission.

"In planning for lighting outlets, the question of electrical household appliances naturally comes up. It is noticeable that clients when asked if they plan to install certain appliances frequently say not at present, but when asked if they think they will ever need them they almost invariably say yes."

In these cases the architect can help materially by pointing out the advisability of providing for all probable future needs when building, and drawing attention to the extra expense involved in rewiring after the home is once completed. Washing machines and ironers are nearly always included in the original plans. An outside plug for garden illumination is another feature which is frequently suggested by the architect, and often had not occurred to the client.

Electricity Increases Value of Out-of-Town Location

Numbers of new homes are being built outside city limits and outside the district served by gas, and in this case there is always a demand for more or less complete electrical facilities. And, to view the subject from the other side, it is the availability of electric power and the development of modern electrical household equipment which are now enabling home builders to choose these out-of-town locations for their new homes, and to know that they will not have to resort to wood stoves and oil lamps.

The intelligent co-operation of the architect is essential in the promotion of the electrical home idea, and by keeping in touch with developments he can do much to forward the proper wiring of new homes.

Have You Started?

Have you started a Home Electric campaign in your town? Have you begun to help the electrical industry as a whole set and reach the bogey of "Two Million People to Inspect 200 Electrical Homes in 1921"? In March *Electrical Merchandising* told in detail the why and the how of a big idea—a master business development plan for the electrical industry in 1921—a plan that ties together the electrical industry and many other lines of business, especially the great real estate interests, in the common purpose of getting houses wired and fully built, getting them electrically equipped, and then selling them to the public. It means more than simply getting a builder or owner to make a model electrical home installation. It means equipping a Home Electric *complete*, with wiring, outlets (there are 125 outlets in the new Home Electric in Cleveland), appliances, furniture, etc., and then *throwing it open for the inspection of the public for a period of two weeks to three months*.

Your town or city needs a home electrical campaign. Why not start now?

architect stated: "In my own work the planning of the lighting scheme plays an important part, and is worked out in great detail both for effects and convenience. In the lighting of a home I aim to reduce to a minimum the wall and ceiling fixtures, substituting portable lamps

*W. H. Ratcliff, Jr., is located in Berkeley, Cal. He has designed a number of modern homes in southern California. All are well equipped electrically. Mr. Ratcliff indorses the "home electrical" enthusiastically.—EDITOR.

Why "Electrical Homes" Mean Better Business for the Jobber

Practical Demonstration of How to Use Electricity Twenty-four Hours a Day Means Better Business Not Only for Jobber but Also for Everybody Else in the Electrical Industry

BY H. L. HARPER

Manager Western Electric Company, Los Angeles

MODERN electrical homes appeal to the electrical jobber for several reasons, primarily because, as a splendid advertising campaign, the electrical home acts as a powerful stimulant to the entire electrical industry, increasing as it does the business of the manufacturer, the central station, jobber, contractor and dealer. Without a doubt the idea of telling our story by means of showing the public through a beautifully appointed home, completely equipped electrically, has given the people a new idea of our business. The fact that each visitor has told numerous friends of the electrical home and also the fact that the newspapers have given this home splendid publicity causes us to believe that there are few people, if any, in the community who do not realize that an electrical home is not just an idea but is something real and practical.

The results of the home electrical campaign directly affect the jobber's business, both in increased sales of wiring supplies and in increased appliance business.

The modern "electrical home" was designed to show the need of more outlets, and from the jobber's viewpoint this is the most important

part of the home. The appeal has been made directly to the public, the ultimate consumers, for the reason that only a very small portion of the total number of homes are designed by architects or by people who appreciate the need of properly wired houses.

Electrical equipment in the majority of homes has in the past been more or less a matter of guesswork, something that was considered last, if at all, and the lack of proper outlets has seriously affected the electrical business. It has not only cut the contractor's work to the smallest possible amount but has directly hampered and in many cases lost the sale of current-consuming devices, thereby affecting the entire industry. The lack of proper outlets has caused manufacturers to market various kinds of socket devices which made it possible to use a lamp and an appliance at the same time. The fact that thousands of these devices are in daily use is the best illustration of the lack of convenience outlets, not only in old houses but in those of comparatively modern design. While the manufacture of these devices has helped the appliance business, at best a socket device which is an accessory rather than a part of the origi-

nal installation is a makeshift and should not be necessary in a properly wired home. The use of myriads of cords hung from a lighting fixture to operate appliances should be as unnecessary as having to use the garden hose to fill the bathtub.

The modern "electrical home" has not only shown the need of convenience outlets but has clearly illustrated the lack of thought given the design of the kitchen and screen porch (Californian for laundry room, back porch, etc.) for the proper accommodation of the clothes washer, clothes drier, ironing machine, ice machine, etc. It has demonstrated that many people cannot use electrical labor-saving devices, not because they don't want them but because their home lacks proper room. While the prospective home builder who has visited the "electrical home" may not be an immediate prospect for all of the devices shown, he is almost certain to insist that proper outlets be installed and that proper space be planned for the future installation of electrical appliances.

While the ultimate result of the modern "electrical home" will be the use of more convenience outlets and the proper design of homes to care for electrical labor-saving devices, the immediate result will be an increase in small appliance sales. The visitors to an "electrical home" have a new view of the electrical industry, they realize that it is a business that helps shorten the working hours in the home, and also makes these hours less tiresome. A number of visitors have been the real appliance users, the housewives, and while in the past many of them have considered electrical devices as just machinery, something that only the male of the species could appreciate, they realize now that an electrical appliance not only does the work for which it was designed but that the appliance, with its polished nickel or clean enameled exterior, is something attractive.

The modern electrical home not only appeals to the jobbers from the standpoint of increased sales but also because it is a practical demonstration of what co-operation can do.

Results followed only because of the splendid spirit of co-operation shown by all of the various branches of the industry, and the success of the home should result in even greater spirit of helpfulness, a realization that only by helping all of the industry can we hope to help ourselves.

YOU ARE INVITED

A Modern Electrical Home has been erected and will be opened for public inspection, from November 12th to 28th—2 to 10 p. m.

The home shown on the reverse side is a model in architectural design and interior decoration. It has been properly wired for the convenient use of all Electrical Appliances, Labor-Saving Devices and Correct Illumination.

Thirty of the most practical appliances that electrical science has developed will be on display.

The home has been completely and artistically furnished and is ready to live in.

You are invited to visit this Home and see the convenience with which Electrical Appliances can be used when the house is properly wired.

HOW TO REACH THE MODERN ELECTRICAL HOME

STREET CARS—Take P. E. Santa Monica Blvd. Car to Kenmore—walk one block south. Or take yellow Helioptope Drive Car to Kenmore—walk two blocks north.

AUTOMOBILES—Vermont Ave. to Monroe, West on Monroe to Kenmore, then one block north. Or Santa Monica Blvd. to Kenmore, then one block south.

YOU WILL NOT BE SOLICITED TO BUY ANYTHING

When the first Los Angeles electrical home was opened to the public, card invitations of about postal card size were used by the thousands to win the active interest of the public. Notice the carefully stated instruc-

tions on how to reach the home, and notice also the emphasis on the fact that the visitor will not be asked to buy anything. The reverse side of the invitation carried an illustration of the home.

More About the J. C. English Store

(Pictured in Sepia in This Issue)

BY D. ESTCOURT

IN THE first place it helps you to be conspicuous if you have a building named after you, and the J. C. English Company of Portland, Oregon, inhabits the "English Building." This is a five-story structure covering 50 x 100 feet, taken by the English company on a ten-year lease, the upper floors being rented to other tenants. The name of the building and the company is carried out in the interior by a suggestion of English Tudor style, as shown in the picture in sepia on India-tint paper on pages 190 and 191 of this issue.

A display case similar to the electrical windows was built for the second floor tenant, in order to maintain the uniformity of the exterior and to give the tenant the benefit of a ground floor window display. Also, on the stairs leading to the upper portion of the building was placed a showcase 20 inches wide which is much valued by the second floor tenant.

A Store Without Counters— Save One

In the ordinary electrical store the customer is separated from the objects of his interest by a rampart of counters manned by one or more salesmen. In this store, however, there is only one counter, an inconspicuous 12-ft. structure in the background, and all merchandise of the smaller type is displayed in wall cases where the customer can walk to them and take a close look. The regular type of show case has been eliminated entirely. The lower portions of the wall cases have cupboards, in which is carried the stock of the merchandise displayed above. The upper portions have concealed glass doors at the sides, and the appliances, being under glass, are not in need of constant cleaning as is often the case with stock on display.

In a store which "goes in for" fixtures as much as this one does, it is unusual to be able to see the ceiling. The J. C. English Company, however, has done away with the dense forest of fixtures which usually hangs over the customer's head in fixture stores, and has confined the display in the main store to one or two special pieces. The bulk of this stock is in special fixture display rooms, one

room being located on each side of the attractive little hall and stairway which give a home touch to the rear of the store.

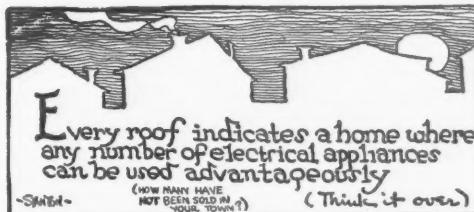
No Congestion of Fixtures

In the fixture display rooms the same absence of congestion is noticeable. There are no more brackets on the walls than might adorn the walls of a home. Brackets are kept mounted on boards in cabinets, and when it is necessary to display one for a customer's inspection, it is brought out, plugged into a twin receptacle and hung on the wall, where its full effect can be gained in a way which would be impossible if the entire stock were on display. The tops of the cabinets make excellent stands for portable lamps.

The walls of the main store as well as those of the fixture rooms are

papered with Kanestone, which provides an effective neutral background for all fixtures, iron, gold, or polychrome. A special effort has been made to have the fixture rooms simple and dignified, so that they do not compete with the fixtures themselves, as is the case where the room is over-elaborate. Another feature is that the better fixtures are segregated in one room, where they may be displayed to the best advantage, and at the same time not detract from the less expensive designs. The charming hall and stairway separating the two rooms are a distinctive feature which carry out the residential idea and serve to attract the attention of the entering customer to the rear of the store.

The general spaciousness and simplicity of the store arrangement, combined with the Tudor suggestion, give this progressive Western establishment a distinct personality which has done much to impress it upon the minds of its customers, and to build up its enviable reputation.



The Country's Building Needs—Three to Five Million Homes by 1926!

BACK in 1890 people of the United States were housed on the basis of 110 families to every 100 dwellings. Today the average is 121 families to every 100 dwellings.

If residential building during the next five years should proceed at no faster rate than at present, the building program would fall so far behind that an average of 130 families would have to be housed in 100 dwellings by the end of 1925.

To correct the condition to a basis of 115 families to every 100 homes (the condition existent in 1915) a total of 3,340,000 dwellings will be required within five years, according to an estimate made by the editors of the *Builders' Journal*. To fully correct the condition more than 5,000,000 homes will be required.

The need for factories, hotels, public buildings, etc., is in direct proportion. While accurate figures are not available at this time, one statistician has made a conservative estimate as follows:

128,000 Factories (\$100,000 or more)	50,000 Apartment Houses
325,000 Factories (Less than \$100,000)	120 Freight Terminals
15,000 Schools and Public Institutions	20,000 Churches and Theatres
6,000 Hotels	3,340,000 Dwellings
	14,000 Railroad Stations and Freight Sheds

Prospects for appliances still abound. It's a matter of aggressively seeking and selling them. Take stock of your present tactics. This article suggests the many ideas that are open to all dealers to use to prove that "Selling Will Sell"

Selling Will Sell, and "Go" Will Make Your Business "Grow"

By W. H. SCHAEFFER

If a dealer in electrical appliances could only hire an aviator and an airplane to take him soaring over his selling locality for half an hour—

If, while he was up there, the dealer would keep looking down at the square miles of buildings, houses and people which he could now see in one eye-full—

If he would continually repeat to himself, "There are still enough people down there within reach of my store to keep me busy selling appliances all through 1921 if only I use the right methods to ferret them out to convince them. Enough people are still there with the jobs and the incomes and the money to afford my appliances; my task is simply to locate them and use real salesmanship on them"—

If he would "come down to earth" with that birdseye viewpoint of his selling possibilities and that conviction that good prospects still abound within his reach—

If he would get together all the

with all the information necessary to convert all types of prospects into buyers—

If he would tighten his belt and go after the business whole-heartedly—

THEN HE WOULD DISCOVER, AS CERTAIN AS SUNRISE, THAT "Selling Will SELL!"

Plenty of Buyers

Take a trip over the housetops of your sales territory in your imagination.

Make up your mind that the buyers are there, that it is merely a matter of extra effort to find them and of efficiency to sell them.

And you will do a business of a volume that will completely eradicate the blues from your system. FOR "SELLING Will SELL!"

How to "Prospect"

First—Review all the methods that exist to find prospects for appliances.

Select as many of these ideas for



known ways of uncovering prospects, and would map out campaigns to use those methods—

If he would make sure that he and his salesforce were equipped

use as you feel you can profitably employ. Remember that this year it is necessary to go to people; they won't come to you in the numbers they did last year.

For your convenience, here is a summary of many of these methods to find prospects:

The telephone:

(a) Select names at random from the directory, choosing those who live on "good streets."

(b) Procure lists of current consumers from the central station. Also get the names of new current consumers.

(c) Consult membership lists of women's clubs, fraternal societies, golf clubs, etc., procured from the secretaries of such organizations.

House-to-house census:

Record on cards the makes and ages of appliances now in use, and ascertain what appliances are not owned.

(a) Use your salesmen for this purpose.

(b) Hire boy scouts to obtain the information.

(c) Employ high-school girls, or school teachers to get it.

Your list of customers:

Often it is successful to offer a cash bonus to users for suggesting names of their friends who buy appliances within thirty or sixty days.

(a) Send a "service inspector" to call to learn if the appliance is operating properly. Have the man endeavor to secure names of friends who might be interested in the same or other appliances. Do the same on regular "repair calls."

(b) When customers call to make payments, have the bookkeeper inquire if the customers know of any friends who might be prospects. Pay 50 cents to the bookkeeper for each lead that results in a sale.

(c) Telephone all your users,

inquiring about their appliances and asking for names of friends.

(d) When customers have about finished paying for their appliances, start work to sell them other appliances.

New residents, wedding licenses, births, society notices, etc.

(a) Watch the newspapers for "tips."

Salesmen, solicitors, collectors, etc., for other lines.

(a) Offer to pay for live "leads" that are developed into sales. Piano, phonograph and sewing machine salesmen, gas and electric meter readers, insurance collectors, milkmen, paper boys and others can be enlisted to locate prospects.

Auto shows, fairs, bazaars, etc.

A demonstrating display at any affair that people attend in numbers puts you in touch with many prospects.

Classified newspaper columns:

(a) People advertising for help, laundresses, cleaning women, etc., often are prospects.

(b) Advertise "Used Appliances" at attractive prices.

(c) Advertise under classified headings such as "Situations Wanted—Washwoman," to supply mechanical laundresses, etc.

Local advertising:

(a) Display advertising in the newspapers.

(b) Billboard posters.

(c) "Movie" slides.

(d) Street car advertising.

(e) Novelties.

(f) Handbills or folders distributed by boys.

Direct mail advertising:

(a) Form letters, with inclosures.

(b) Double postcards, with return card.

(c) Mailing folders, supplied by manufacturers.

Note: Follow up a circularization of any list by personal calls. Do not depend on the phone or mail replies for your leads.

"Stunts" to arouse interest:

(a) "Club Offers." A small cash payment and time terms to people who respond during a specified period.

(b) Lend appliances to other merchants to complete their window displays, a card giving you credit for the loan to be placed in window.

(c) Demonstrate in your windows.

(d) Offer appliances on trial.

(e) Keep several second-hand appliances on hand, and rent them out. Try to develop renters into owners.

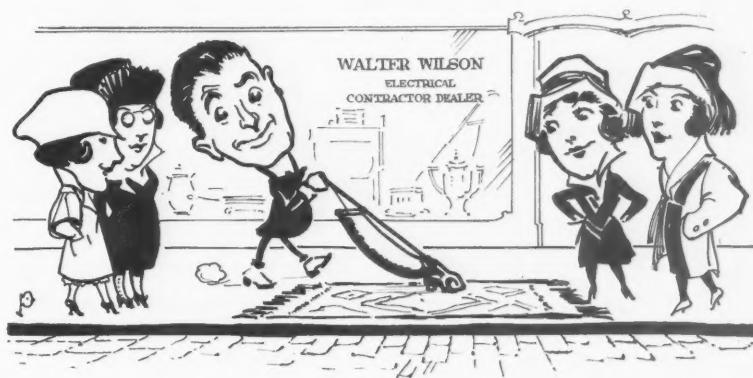
(f) Offer to do "One Washing

"open house" discussion to bring forth the best answers. Insist that every man master the best answers to all objections.

"Classify" Each Prospect

Third—Train your men to classify their prospects before they launch into selling talks.

Prospects can be roughly grouped into four classes. Some prospects may be in more than one class, of course, at the same time.



Free," or to "Clean Rugs Free."

(g) Demonstrate the appliance outdoors, in front of your store.

(h) Put on a "Sale," as a "Disposal Sale," or "Carload Sale," "Economy Week," with special attractions—but *not* a cut-price sale.

(i) Arrange for demonstrations and lectures before domestic science classes, women's clubs, etc.

(j) Arrange with a church or organization that is raising funds to contribute so much per sale to the fund for sales made to leads they uncover.

Stage Sales Contests

Second—After you have planned your strategy to find prospects, give careful heed to the important matter of how best to close them.

Gather your salesforce for a sales meeting. Stage a series of monthly contests among the salesmen to arouse their ambitions to the fighting point.

Offer credit for "calls," for "demonstrations," for evening demonstrations, trials and for actual sales. The idea is that if a salesman can be induced to make more calls he will sell more appliances.

Compile a list of "Objections." Ask the men to name the resistances they meet. Then have an

These classes are:

(1) The person who thinks she is getting along all right the way she now does her work.

She must be made to realize the shortcomings and inefficiency or extravagance of her present methods before she is interested in details concerning the appliance.

(2) The person who realizes that something is wrong with her present methods but does not recognize what the trouble is.

She must have the solution to her difficulty pointed out clearly before she will take interest in the appliance and its superiorities over competing articles.

(3) The person who knows she wants the appliance but thinks she can't afford it.

She and the man of the house must have the long-run economy of the appliance proved before they can be aroused to a desire for it by technical comparisons.

(4) The person who wants to buy an appliance but is undecided as to which make to buy.

She will be interested at once in detailed explanations of the superiorities of the appliance. Too many salesmen overlook the foregoing three classes and lose sales by considering all people to be in this fourth class. Beware of this danger.

There are about 107,000,000 folks in these, our United States, and there are about 8,500,000 automobiles. That means one to every dozen people. Every owner of a motor vehicle is in the market for electrical products that he ought to buy from his nearest electric shop. This article gives some usable suggestions for getting this business.

Making the Automobile Owner Your Regular Customer

By C. L. FUNNELL

WALK out to the front window of your electric shop and look out into the street. Count twelve people passing by. Then say to yourself that if those twelve citizens are an average dozen, picked as a fair sample from the population of your community, one of them owns a motor vehicle of some sort. And that one is in the market for a whole string of electrical products that you ought to sell him.

Now look beyond the sidewalk. Watch the roadway. See that touring car going by? What does it mean to you as an outlet for electrical goods? There! It's stopped on the other side of the street. You can take a good look at it. From top down, now, let's look her over as an electric shop market. Well, that mohair top has to be cleaned. Often. How? Brush, or broom probably. And then not

thoroughly. See the streaks where Father didn't finish up his job? Bet Mother will give him fits if she sees it. Well, he ought to have an electric vacuum cleaner to keep that top in good shape.

Wonder if he has his garage wired? Ought to do it. He needs a big light overhead, and a bunch of outlets for handlamps and the vacuum cleaner.

Now look at the windshield. See that spotlight there? New bulbs are needed for it, regularly. And speaking of lamps there are his sidelights, headlights, tail-lights and dashlights. You ought to carry a complete line of these lamps with a table showing just what size is needed for every place on each standard make of car. Have a display of them on the counter to remind Mr. Motorist when he drops in.

There's that round button on top of the steering column. The horn button. Ever notice what a difference there is in the sound of electric horns? You hear a high pitched, squeaky signal and you think of a cheap car before you even look around. And the deep, dignified, pleasant warning makes you feel instinctively that you are in the presence of class. All right. You can make any car in the world sound like class by installing a good electric horn.

And it's a simple matter to mount a half dozen on a display rack in the store. They can be connected through separate pushbuttons to a set of dry batteries mounted in the base of the rack. Then customers can try them for themselves. A concealed switch will silence the concert that ensues with the arrival of small boys.

This horn idea is really worth a letter to all your prospect list. Tell them frankly that cars are judged

Automobile Registration Compared with Wired Houses, by States

	Automobiles Registered			Wired Dwellings		
	Passenger	Commercial	Total	Motor-cycles	Number of Dwellings	Population Living in
Alabama.....	61,941	12,696	74,637	1,035	52,400	252,000
Arizona.....	30,559 (a)	4,000 (a)	34,559	750	12,920	58,200
Arkansas.....	55,582	3,500	59,082	—	48,200	221,000
California (f).....	534,814	34,078	568,892	20,047	561,000	2,580,000
Colorado.....	121,212	7,728	128,940	3,364	99,100	427,000
Connecticut.....	95,150 (a)	23,950 (a)	119,100	4,375	119,830	731,000
Delaware.....	16,500 (a)	1,800 (a)	18,300	674	9,270	43,600
Dist. of Col. (b).....	44,855	6,826	51,681	2,648	21,800	124,000
Florida.....	64,185	10,439	74,624	1,275	67,000	302,000
Georgia.....	132,000 (a)	14,000 (a)	146,000	1,382	80,700	396,000
Idaho.....	48,850 (a)	2,000 (a)	50,850	763	38,160	172,000
Illinois.....	504,240	64,674	568,914	10,368	626,000	3,505,000
Indiana.....	300,226	32,481	332,707	8,823	197,700	850,000
Iowa.....	407,030 (a)	30,000 (a)	437,030	4,000	107,400	482,000
Kansas.....	268,159 (a)	26,000 (a)	294,159	2,972	145,700	640,000
Kentucky.....	99,417	13,258	112,675	1,546	90,200	442,000
Louisiana.....	65,000 (a)	5,000 (a)	70,000	500	44,800	224,000
Maine.....	55,600	7,600	63,200	1,590	77,700	365,000
Maryland.....	100,313 (a)	12,000 (a)	112,313	5,194	50,000	255,000
Massachu. etts (c).....	253,245	51,386	304,631	15,143	338,500	2,232,000
Michigan.....	366,946	45,771	412,717	8,011	257,000	1,156,000
Minnesota (d).....	204,300 (a)	19,400 (a)	223,700	7,550	188,000	1,034,000
Mississippi.....	60,000 (a)	4,000 (a)	64,000	—	35,600	168,000
Missouri.....	273,308 (a)	23,700 (a)	297,008	3,954	207,000	1,014,000
Montana.....	59,450 (a)	1,200 (a)	60,650	675	51,300	231,000
Nebraska.....	200,000	19,000	219,000	2,100	88,700	407,000
Nevada.....	9,963 (a)	500 (a)	10,463	40	14,480	52,200
New Hampshire.....	30,240	4,440	34,680	2,542	29,900	143,000
New Jersey.....	204,125	23,612	227,737	11,041	218,000	1,350,000
New Mexico.....	16,100	6,000	22,100	219	13,300	57,200
New York (f).....	559,521 (e)	124,398	683,919	69,349	440,000	4,835,000
North Carolina.....	127,405	13,455	140,860	1,418	49,200	250,500
North Dakota.....	88,385	1,455	89,840	898	42,300	207,000
Ohio.....	538,000	82,600	620,600	19,400	362,500	1,705,000
Oklahoma.....	204,000	9,000	213,000	1,600	60,900	293,000
Oregon.....	93,790 (a)	10,000 (a)	103,790	3,517	80,000	368,000
Pennsylvania.....	521,835	48,329	570,164	23,981	365,000	1,863,000
Rhode Island.....	40,768	9,563	50,331	2,223	41,800	285,000
South Carolina.....	83,618 (a)	9,200	92,818	908	51,000	255,000
South Dakota.....	113,000	9,000	122,000	560	39,300	181,000
Tennessee.....	90,214	11,638	101,852	1,151	54,500	267,000
Texas.....	397,693	30,000 (a)	427,693	4,293	218,800	1,095,000
Utah.....	37,012	5,692	42,704	1,115	68,600	350,000
Vermont.....	28,706	2,916	31,622	946	36,320	167,000
Virginia.....	103,000	13,670	116,670	2,233	90,300	461,000
Washington (g).....	154,350	25,864	180,214	4,969	200,000	960,000
West Virginia (h).....	69,862	10,802	80,664	1,659	37,200	190,000
Wisconsin.....	277,095	16,205	293,300	8,002	147,700	738,000
Wyoming.....	22,926	1,000	23,926	327	13,580	63,800
Total.....	8,234,490	945,826	9,180,316	271,230	6,291,160	33,008,500

(a) Approximate.

(b) For fiscal year ending June 30, 1920.

(c) For registration year ending November 30, 1920.

(d) For the three year period ending December 31, 1920.

(e) Includes 3,560 dealers' licenses.

(f) For first eleven months of registration year ending January 31, 1921.

(g) From March 1 to December 31, 1920.

(h) For eighteen months ending December 31, 1920.

by sight and sound; that you can't do anything about the looks except supply vacuum cleaners for top and upholstery. But the sound adjustment is a simple matter, as you can demonstrate in three seconds in your store. Invite them to make their cars sound as good as they really are.

Now look at the dashboard. There is an array of switches and meters that is bound to need minor adjustment occasionally. And the wiring which connects them with batteries and generators needs replacement every three years.

The Storage Battery and Its Appurtenances

Following those wires back under the hood you will find the generator for charging the storage batteries, the motor for starting the gasoline engine, the distributor, and the spark plugs. Motor and generator require new brushes once in a while, and the hand of a sympathetic electrician twice in a while. Storage cells need hydrometers, new electrolyte, distilled water, and sometimes new plates. Frequently, also, they need recharging. Even whole new batteries are required in sufficient quantities to warrant carrying a few in stock.

In connection with storage-battery service a supply of free distilled water will serve to invite automobile owners into your store, and statistics show that it takes two auto fans exactly eleven seconds to become well acquainted. So once you have him in, you can make him your customer in short order.

And speaking of those storage batteries, every motor car owner is a prospect for a small rectifier in his garage to keep his batteries up to full charge.

We're down to the running board now. Look in the tool box a moment and see if you can find a battery flashlamp. Should be there. That's one more thing you can sell the owner.

Motor-Driven Compressors and Tools for the Home Garage

And now you're right down to the tires. Which of course brings up the subject of an electric-driven air compressor for that home garage. That finishes the car. But there's one more thing to think about in the garage. The average man thinks he is a good mechanic. If you care to

prove this ask the first man that comes into your store. He'll admit it quite frankly. So the car owner should have a chance to put on a suit of nicely tailored dungarees and muss around his garage on Sunday morning. A small electric motor can be installed to run a little drill press for him. Besides manufacturing holes, it will be handy for grinding valves, and fitting up things for the house.

So there is a market for your services and your goods in every home blessed with an automobile. In a much larger sense there is a market in every business where a motor truck is owned. Motor trucks get harder service, and their regular

operation is more essential than that of the touring car. Pneumatic tires are coming in fast for commercial vehicles and that means real compressor business. This automotive field means a whole lot to you, and as you walk back to your desk here are some other things to think about in planning to make every car owner in your community your regular customer.

Build Up the Storage-Battery Business

First, the storage-battery side of the market is perhaps the nearest to you. People have learned to think of electric shops and storage batteries in the same sentence. Build up the

There Are More Electric-Lighted Automobiles than Electric-Lighted Homes

1921 Figures:

8,500,000 *Electric-Lighted Automobiles*
6,500,000 *Electric-Lighted Dwellings*



And here's what the electric shop can sell to the man who owns a car

Sidelights	New plates for storage battery
Spotlights	Rectifiers for battery charging
Bulbs* for spotlight, headlights, sidelights, tail-lights and dashlight	Magnetics
Spark plugs	Vacuum cleaner for top and cushions
Electric horn	Wiring for garage
Automobile fuses	Lighting for garage
Switches and meters	Flashlamps
Wiring for car	Cigar lighters
Brushes for generator and motor	Air compressor for garage
Storage batteries	Motor-driven drill press for garage
Hydrometer for storage battery	Electrically-heated steering-wheel grips
Acid for storage battery	Electric signals

*Sales of automobile lamps (miniature) alone now exceed the total sales of large lamps (standard Edison-base types) for homes and stores. Seventy million automobile lamps are now sold annually for renewal purposes alone.

storage-battery business, and the rest can be coaxed along logically.

Over in Newark, N. J., a man named Teebles has established a splendid battery business based on a large clientele of motor car owners. Mr. Teebles is an expert on storage batteries, having been in the business seventeen years. He runs a call-and-deliver service, for which he makes a moderate charge, and will put batteries in top-notch condition on very short notice. This shop also sells auto accessories of all sorts.

Second, a mighty valuable asset to you in building up regular business in this field is a card list of all the car owners in your community, with the make and year of their cars. There are plenty of ways to get this list. One of them is the offer of free inspection of the electric systems on their cars, with advice as to the improvement of its operation. Another is a free road map of your county to every motorist who will call and register in your car owners' book.

After you have such a list, send them a friendly letter once every month, inclosing a manufacturer's folder on electric horns, or hydrometers, or lamps. Invite them to call. Make them think of your shop as the place to get sound advice on any electric feature of their cars. And it is not necessary to remind you that every car owner should have an electric vacuum cleaner and washing machine in his home.

Selling Sells Automobiles, Also Accessories!

We can all take a good tip from the attitude of a Brooklyn automobile agency toward the present condition of the retail market. Sales slowed up at the Bishop, McCormick & Bishop office last fall. Other dealers talked about "dormant buyers." These fellows called in every employee in the place, from president to washer's helper. They said sales could be obtained by working for them. And they organized their staff into teams of prospect getters who hustled up the names of several hundred probable buyers. And sales picked up.

The tip for us is that it is easier to sell equipment to a man who owns a car than it is to sell a new car.

And one of the big advantages of putting in hard work to build customer-friends among car owners is that they are such excellent prospects for all the other good things you sell.

Selling "Farm Electric" Outfits

(Continued from page 180.)

prised a series of five advertisements of similar appearance, displayed in the same corner and page for five consecutive days. The copy was carefully prepared, starting with matter so general that it could be classed as institutional advertising. The second day we mentioned "dealer opportunity"; the third day we stated that a representative would be in town, and so on, until the last day's insertion ended, "See John Jones at Union Hotel today, he's there." This series cost us less than a single full page and we got a live dealer and three retail sales.

Getting the Plant to the Prospect

I have said before that farm-plant sales are made *not* in the office, *but on the farm*. An electric plant weighs from three hundred to eight hundred pounds complete, and a pumping system, vacuum cleaner, extension cord, lamps, etc., add perhaps three hundred pounds more. Getting all these items into a farm yard ten miles from town is a problem for the ingenuity of every dealer, but these solutions presented themselves:

One is a small glass paneled showcase, fitted closely over the plant and battery. This makes the equipment compact and is much easier to transport in a small car. I believe, however, that the place for a glass showcase is in a store, for service on a country road plasters the outside of the case with dust, which neutralizes its advantages of transparency.

A more satisfactory display is accomplished with a closed body, the sides of which open wide as doors. The back panel comprises a high tail-gate and an upper half swings into a vertical position. This gives an excellent view of the plant inside and offers nearly 100 square feet of space for display advertising.

Standardized sales talks and a thorough knowledge of the product are absolutely essential. The second statement needs no comment. As for the first, if a poor salesman can put his stuff across by using a *live* sales talk, this same line will be a proportionate help to a more able man.

The distributing company I mentioned earlier in this article has succeeded in creating new merchandisers over the greater part of one state. This shows that there are

men of sufficient vision and initiative to take the plugs. Some of them fail? Yes. But some of them, also, are on the right road to permanent prosperity.

Let's Look at This Farm-Electric Dealer

Now, Mr. Contractor-Dealer, just visualize one of these chaps. He starts today with a farm electric plant on the tail end of a Ford. No store, no business standing, far below your notice as a competitor. Now look ahead. At the start he may turn his wiring work over to you, but not for long. As soon as his business warrants, he will have a crew of his own—he may have some of your men too! He may only have desk room today, but it won't be long before he will have to stock accessories and fixtures, and also have a display room—and don't think for a moment he won't handle "110-volt stuff."

When the time does come to have a store—location is a mighty important consideration. A dealer cannot afford to let his customers hunt him out in an alley, nor yet does he require a big "Main Street" front. One dealer that I know of rented what was formerly the office of a moving-picture theater. This particular house catered to out-of-town trade and Mr. Dealer now has his display immediately adjoining the theater lobby where all the rural picture fans stand in line for the "second show." There is an interesting psychological angle to this location. The ordinary display window must attract the attention of the passer-by, who probably has something on his mind. This display catches the buying public in an open-minded mood when it is consciously spending money and seeking new impressions.

The next time, therefore, a district man talks farm electric plant agency to you, count ten before you say "Not interested."

To handle this business takes a wiring crew, fixture and accessory stock and a real salesman. You have at least the first two of these today. The fourth isn't impossible to find. Can you afford to invite a live competitor to open up right opposite you? And, brother, don't forget for a minute the buying public walks on *both* sides of the street.

What About the Druggist?

Here's a Detroit Pharmacist Who Adds Special "Electrical Department," Manned by Manager and Two Assistants, and Does Electrical Appliance Business Exceeding \$125,000 a Year

By D. G. BAIRD



This attractive "electric shop" is in the basement of Cunningham's drug store, on Woodward Avenue, Detroit. It is a special department of the druggist's business and is handled by a manager and two assistants. The annual business in electrical appliances and labor-saving devices, including wash-

ing machines and vacuum cleaners, now totals \$125,000 a year. "Every machine we sell is demonstrated right here in the shop," explains Manager Wing. "Then we set a definite date for delivery and our lady demonstrator goes out and sees that it is properly installed

and gives another demonstration to make sure the customer understands its use. For a period of a year a service man calls around every few months and looks over the machine, whether there has been any call from the customer or not. This visit gives him a chance to build more sales."

IT HAS long been said that the drug store will sell anything that can be sold, but with the exception of a few small electrical articles electrical goods have never been considered a desirable line by the dispenser of pills and specifics.

But the time seems to be at hand and already many drug stores are taking on electrical lines. One of the most complete electrical departments in a modern pharmacy handling a complete line of electrical household necessities and conveniences is that of A. R. Cunningham of Detroit, Mich.

The Cunningham store is located on Woodward Avenue, the principal

thoroughfare of the city, in the very heart of the downtown shopping district. The "electric shop" is in the basement of the store and measures 25 x 45 ft.

Along the walls on each side are handsome cabinet fixtures displaying—behind sliding glass doors—such necessities as percolators, toasters, grills, chafing dishes, kitchenettes, curling irons, vibrators of all standard makes, violet-ray machines, accessories of all kinds, and other articles.

The center of the room is occupied by electric sewing machines, vacuum cleaners, electric washing machines, and ironing machines.

And this shop is selling electrical goods! The department was established about a year ago and is already occupying all of the time of a manager and two assistants, and is bringing in more than \$125,000 a year. Not only this, but every month without exception has shown an increase of sales over the previous month. At present the shop is selling an average of one washing machine a day, with a goal of 300 a month. Vacuum cleaners, sewing machines and smaller articles, of course, sell much more rapidly.

The manager of the department is an expert electrical salesman. He believes in selling on durability of

construction and service, and he takes great pains to make the customer understand thoroughly just how the machine is made, how to operate it to the best advantage, and just why it costs what it does.

A salesman came into the store one day and asked to see an electric iron. The manager showed him the make he carries and told him the price. Whereupon the customer asked in a disgruntled tone: "What difference is there between electric irons that there is such a difference in prices of different makes?"

The manager smiled pleasantly and proceeded to explain in great detail just how, why, and wherefore. When he had finished the customer explained that he himself was a salesman and added: "I don't know when I've enjoyed anything so much as I have your explanation of the construction of your iron. Furthermore, I've learned a lesson in salesmanship that I'll not soon forget."

He bought the iron.

Another customer, a lady, was one who had been offended by a salesman in another store. She became quite a steady customer of Cunningham's and one day she explained to the manager of the electric shop: "I always enjoy trading here because you *explain* everything so clearly."

The Customer Rightly Sold Stays Sold

"Sell a customer right in the first place," says Mr. Wing, the manager, "and he will stay sold. That is our ideal—to keep our customers sold and make them our best advertisers.

That is why I take so much pains to explain everything about our goods. I want the purchaser to be perfectly familiar with the construction and operation of the machine he buys. If he is, he is not likely to become dissatisfied.

"Every machine we sell is demonstrated here in the shop. Then we set a definite date for delivery and our lady demonstrator goes out and sees that it is properly installed and gives another demonstration to make sure that everything is in perfect condition and that the customer understands the operation.

"We also maintain a service department. Every machine we sell is guaranteed for one year and we make all repairs for that length of time free of charge. A service man calls around every few months and looks over the machine whether there has been any call from the customer or not. In this way we see that the machine is kept in tip-top order and the service man also connects up with the neighbors who have become interested in electrical household necessities since our customer bought."

"What about the criticism of electric washers that they 'are all right for clean clothes, but not for dirty ones'?" he was asked.

He turned and called a customer over and said: "Tell this gentleman what you think of your washer."

The customer smiled and replied: "Well, I'm a railroad engineer and I usually tell folks who ask me that question that I never wore clean overalls in my life till we got our electric."

This satisfied customer, by the way, was looking at an ironer at the time and said he intended to buy one the following month.

This Drug Store Electric Shop Advertises Freely

Cunningham is a good advertiser. He recently made excellent advertising capital out of the following incident:

A couple determined to send their rugs, which were very dirty, to a cleaner's and then buy a vacuum cleaner and keep them clean.

The rugs were sent out and the cleaner was bought from Cunningham. When the rugs were returned the lady decided to try her new vacuum cleaner and see whether she could get any dirt out of the newly cleaned coverings. To her surprise she got quite a quantity. She told the manager of the electric shop of the incident and he used it in his advertising.

This not only brought new customers but it also brought representatives of several cleaning establishments in the city who wished to know who had done the poor job of cleaning the lady's rugs!

The salesman was questioned about his method of dealing with dissatisfied customers.

"I'm glad to say we don't have enough to really answer your question fully," he replied. "We take every precaution in selling and it is very seldom that there is any dissatisfaction at all. In the few instances we have had I have always gone out to the home myself and investigated the cause of the trouble.

Business Comes to the Man Who Goes After It!

*Are We Going to Let the Druggists, Jewelers, Hardware and House-furnishings
Stores Win Away the Cream of the Electrical Appliance Business,
Which They Now Look at So Longingly?*

ELECTRICAL MERCHANDISING believes that the sale of electrical appliances can be performed best by electrical people and through the electrical trade. We do not admit that the best service will be rendered to the public nor the most healthy condition of the business will follow if druggists, jewelers, department stores and hardware stores attempt generally to sell these highly technical articles as side lines.

Of course when a non-electrical merchant organizes an electrical department and gets the proper kind of electrical sales help and sales management to sell his goods he becomes an electrical dealer, but the purpose of ELECTRICAL MERCHANDISING is to encourage and urge electrical business men, dealers



and contractors to go after this business adequately for themselves, and to see in its true aspect the attractive field in which we are already engaged, and which is looked at with such longing eyes by other non-electrical merchants.

To hold this electrical business electrical stores must be made as attractive places to visit and buy in as are modern drug stores and jewelry stores. And merchandising policies of *service to the public and satisfaction to the purchaser* as liberal as in those obtaining in this Detroit drug store electric shop must control if electrical stores are to hold their proper major share of the electric appliance business.

I have usually found then that the dissatisfaction was caused by some very minor matter, probably by the false criticisms of jealous neighbors.

Satisfied Customers at All Costs

"As a general thing the electric companies don't take back used goods and it is rather embarrassing for us to have to do so. But we will refund the customer's money or give him other goods of equal value if necessary. We aim to have satisfied customers at all costs."

As has already been said, Cunningham's is one of the very few drug stores in the world having a complete electric shop, but the success of this store proves the opportunity for selling electrical appliances anywhere when such sales are handled on an enterprising merchandising basis.

Whether or not drug store appliance selling is to be regarded as a good thing depends upon the viewpoint. The exclusive electrical goods dealer will probably view the movement as an unfair encroachment upon his preserves, while the druggist will consider it a legitimate sideline that will increase his service to his customers.

But the public must be served with electrical goods and appliances, and the case of this Detroit drug store electric shop offers a lesson to every electrical dealer that *selling will sell electrical appliances and that profitable appliance business comes to the man who goes after it!*

Wireless Fog Signals to Be Installed at Entrance to New York Harbor

The Secretary of Commerce has announced that in view of the important development of a radio compass by the Bureau of Standards three wireless fog signals will be immediately installed at the entrance to New York harbor by the Lighthouse Service. Each of these three stations is equipped with an automatic radio set sending out signals continuously during fog or thick weather. They may be picked up on shipboard by means of the new radio compass, which indicates the direction from which the radio signals are sent out, and by taking observations on the different stations the captain of a vessel may determine his exact posi-

tion without being obliged to rely on the former unsatisfactory method of locating himself by the sound of whistles and fog horns.

How a Department Store Buys Its Stock

When the buyer for a department store considers a line of merchandise, he does so on a basis as nearly scientific as is possible for goods of timely or seasonable value. If he overstocks, he knows at the time that he is gambling. If he understocks, it is because he has gaged the market law after adequate warning from his statistical information.

The modern department store draws up its buying plans on printed forms. These forms are filled in by the statisticians of the accounts department with records of previous years' operations in the lines under consideration. Thus, the buyer who is looking over a line of household wares, for example, knows what the sales of these lines has been during the three preceding years and what percentage of mark-up has applied on these goods. He plans his current year's purchases and determines the permissible mark-up accordingly.

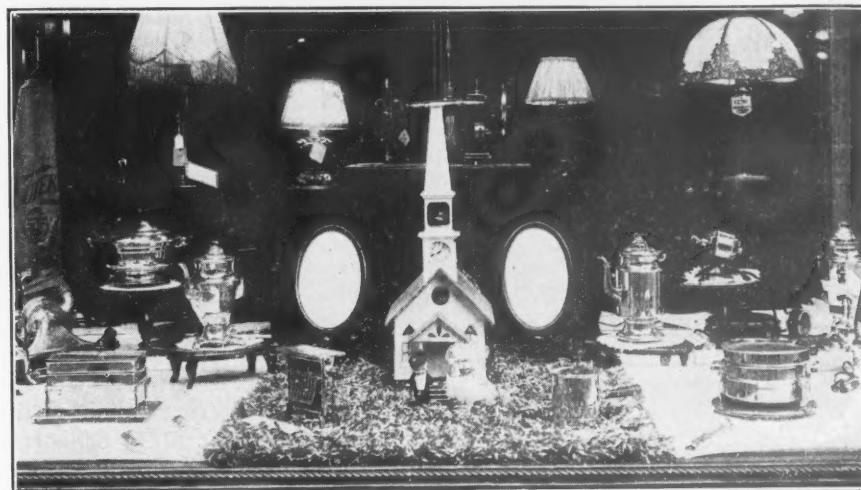
But in addition to this basic information, he has an array of details which serve him as light-houses serve the navigator—sure guides toward safety and abrupt

warnings against danger. He knows, among other things, how many mark-downs he had to give each particular class of goods in previous years, and so is able to mark tendencies either for or against the merchandise. He knows the cost of sales for previous years and can judge pretty accurately whether these costs and the permitted mark-ups will leave him an adequate profit.

He sets a variety of warning signals against himself so as not to be carried away by enthusiasm or through carelessness to find himself out of stock. Of these the most important warnings are the monthly and season's buying limits, which, when they run either high or low, represent a certain danger. These limits are closely contrasted with the monthly and season's sales, so that the buyer does not operate upon a predetermined schedule entirely, but can raise or lower his limits according as sales run materially more or less than expected.

The whole idea behind the department store buying system is to utilize exact information in current purchases, to eliminate guess-work, to neutralize enthusiasm and prevent procrastination. These principles are just as sound and just as readily applicable to the one-man electric shop as to the 100-department merchandising establishment.

Have Your "June Bride" Gift Windows on Display in May



June may be the month of brides, but May is the month of bridal gifts, for all that month and for weeks before the selection of a bridal gift is occupying the minds of most of us. The electrical store has as fair a chance as any to become the "bridal gift shop" of May, for an electrical gift combines beauty, usefulness and novelty—the "three musts" of the gift buyer. And

the store that makes its gift suggestions earliest will be the store best represented in the bridal home. In the very attractive "June Bride" window, shown above, of the Narragansett Electric Lighting Company, a toy bride and bridegroom coming out of a toy church proved a drawing card that delighted hundreds of passers-by, men as well as women.

Electrical Merchandising

The Monthly Magazine of the Electrical Trade

believes that:

1. Goods must be sold and business done at a profit.
2. **Business comes to the man who goes after it.**
3. Central stations must compete with other retailers at a profit.
4. The contractor-dealer must go after business if he expects to get what he deserves.
5. Discounts in the chain from manufacturer to jobber to dealer must be so adjusted that every man who has a function gets paid for it.
6. It is to the central station's interest to encourage and foster retail sales by every retail electrical dealer in its community.
7. Electrical contractor-dealers should cease selling merely wiring jobs or appliances, and sell an electrical service.
8. The electrical merchant—central-station man, as well as contractor-dealer—must analyze his business, know his costs, and adopt modern merchandising methods in both buying and selling.
9. The electrical trade must think and practice "Quality Electrical Work," using quality materials. This means that owners, architects and builders must be shown the advantages of equipping houses throughout with convenience outlets; that plugs and receptacles must be standardized; that fixtures should be equipped with standard-plug connections; that lighting outlets and switches be located with regard to the principles of good illumination and convenience; and that meter-boards be so located that meters can be read without entering the house.
10. It is the duty of every electrical man to help educate the public to use electricity and electrical devices that lighten the labor of the home, office, shop and factory. To this end we urge local newspaper advertising on the part of every dealer handling electrical appliances, and that advertising departments of local newspapers be made part of the local electrical industry.

Easier Credit Conditions Will Help Us Sell

M. PIERRE JAY, chairman of the board of the Federal Reserve Bank of the New York District, is authority for the statement that during 1920 the banks of the United States reduced their holdings of Liberty Bonds by 31 per cent.

This means two things:

1. The consuming public is beginning to absorb Liberty Bonds.
2. The banks of the country will now have available that much more credit for commercial operations and for the electrical industry.

ELECTRICAL MERCHANTISING has insisted that "selling will sell." But selling requires credit to finance, and credit comes from banks. Banks that are not liquid cannot co-operate with the electrical industry—but banks, by reducing their holdings of Liberty Bonds and from other causes, are more liquid today than for months past. Credit can be given to the electrical industry if the industry will put into practice the idea that *selling will sell* and then "get the business."

Mix in Some Brains!

ANY half-trained mechanic can wire a house. For all he has to do is to learn his trade and go to work. He can string wires and screw up switches. He can thread pipe and put up fittings. He can connect the fixtures so that lights will burn. But that is not the thing that counts for most, year after year, in living in that house. It is the *thinking brains* mixed with this work that puts the comfort in electric service in the home.

"Brains" signify properly located switches, conveniently positioned near the entrances to rooms, and the

knob sides of doorways. "Brains" mean the thoughtful arrangement of bracket and ceiling fixtures, for *best lighting* service. "Brains" are the synonym for *knee-high and waist-high receptacles* in those places where appliances must be frequently attached and disconnected—as in the kitchen and pantry, and again at the vacuum-cleaner outlets in hallways, bedrooms, and so on. "Brains" will oblige the sensible location of the meter-board so that the meter dial can be read from *outside the house* without disturbing the household or delaying the meter reader.

Safety and Service in Wiring the "Home Electric"

THE house wired "with brains" will have a bracket light over the kitchen sink, with pull chain properly insulated. Pull chains on bathroom and basement sockets will all be rendered shockproof and safe. Fuse circuits will be labeled. And there will be no exposed or unsafe knife switches or open cut-outs.

"Brains" will always be the highest-priced and best-selling commodity in the business market. Yet unlike anything else the electrical man sells, they can be applied and used, and sold anew each time at a profit without diminishing the original supply.

The electrical man who "mixes in some brains" in his housewiring jobs will find that he has started along the business path of fuller service to his clients and better profits for himself.



Call Them "Farm Electric" Plants!

TOO MANY electrical men are accustomed to speak of "farm light plants." It is perhaps this practice that has resulted in the general opinion that a farm-electric plant is a lighting plant only—an opinion honestly formed by the public, due to the facts that so many manufacturers and dealers call their outfit "Farm Light Plants."

This misunderstanding has even reached the point where many small-town bankers throughout the country are holding up loans to farmers who want to purchase farm-electric plants, on the ground that these plants are capable of furnishing light only and, therefore, are in the class of a luxury rather than a necessity, in which latter class they truly fall. Such a condition would certainly never have come to pass if the country banker, when he saw or heard of a farm electric plant, had had it made clear to him that these plants are *power and light outfits* and that their chief function is to furnish *power* and that the light the farmer gets from them is *from the point of view of the power user* a by-product and incidental.

Let's call them "farm electric plants" as we sell the farmer on the idea of *complete electrification* of every operation of the farm home, barn and farm-yard!

Letters to the Editor

They Know Not What Their Commercial Departments Are Doing!

To the Editor of ELECTRICAL MERCHANDISING:

I was much impressed with the editorial in the February number of ELECTRICAL MERCHANDISING headed "Are You Willing to Pay the Fiddler?"

It seems to me that the central stations which are conducting such bargain sales are certainly destroying all the good work that has been done in the last few months toward bringing the various elements of the business together, and I do hope that you will continue to bring the attention of the electrical industry to the activities of these central stations at this time.

As a manufacturer said to me this morning, "It is rather inconsistent for the National Electric Light Association to be asking for the assistance of manufacturers in giving advertising space to tell their troubles to the public, while they allow their own commercial departments to play havoc with the market."

Isn't it queer that the executives of the lighting companies don't get the point? Do you know, I believe that half of them don't really know what their commercial departments are doing, and the injury they do to the business?

Yours truly,

E. W. ROCKAFELLOW.
General Supply Sales Manager
Western Electric Company,
New York City.

Says Broken Package Prices Are Unfair to the Small Dealer

To the Editor of ELECTRICAL MERCHANDISING:

The writer has read with interest several articles in ELECTRICAL MERCHANDISING written with a view of bringing about a more co-operative spirit between jobber and contractor-dealer. No doubt much has been accomplished by this. But while working along lines to help each other, an important matter concerning the small contractor-dealer has been entirely forgotten. The matter I want to bring up for discussion in behalf of the small contractor-dealer is the difference in price between standard package and broken package.

As all familiar with our line of business know, an electrical jobber taxes the less-than-standard-package buyer from 10 to 50 per cent for breaking a package. For instance, we are quoted \$0.294 each on a standard package of 500 $\frac{1}{2}$ -in. cap key sockets. If the package is broken a tax of 12½ per cent, or \$7.30, per hundred is added. On a case of sockets that would wholesale for \$147 we are taxed \$37.50 if the package is divided up among four or five small dealers. Sockets are not in a class by

themselves. Everything in the electrical line comes in for its heavy tax on the small dealer, whose business does not warrant him in buying in standard packages.

I know the jobber is in a good many instances under contract with the manufacturer to sell certain articles for certain prices according to quantity. It is time, however, that he bring his influence to bear on the manufacturer to do away with these methods and adjust his business along the lines as practiced by the wholesale hardware, plumbing, mill supply houses and others handling similar lines. If the country hardware dealer was taxed by the hardware jobber like the electrical dealer is taxed by the electrical jobber all the hardware stores would be in the larger cities, as the electrical stores are. If the electrical jobber will meet the small-town dealer half way it will not be long before every small town will have a real electrical merchandising store, and consequently a new field will be opened for the electrical jobber.

Now that our country is going through the readjustment stage, it is a good time for the electrical jobber to meet the small contractor-dealer half way on this condition. With the phenomenal growth of the electrical industry the small contractor-dealer will be an important factor in future

business. As a member of the small contractor-dealer class I respectfully ask that this matter be given due consideration by manufacturers and jobbers.

Yours truly,

J. A. INGMAN.
Griffin Electric & Plumbing Company,
Griffin, Pa.

Door Switches or Pull-Sockets for Clothes Closets?

To the Editor of ELECTRICAL MERCHANDISING:

Referring to the Home Electric diagrams in your March issue in which you submit floor plans of wiring, I notice that you have specified or shown door switches for the closets. Personally I do not approve of door switches. We never recommend them, and we advise our clients not to install them, but to put in their place pull-chain receptacles from the ceiling. Our reason for this is that housekeepers desire to air their closets and keep the closet doors open in order to properly ventilate them, and with door switches, the light will be kept burning unless a step-ladder is used to turn the bulb in the socket.

I well appreciate that door switches have their advantages in hotels and other such places, but from our experience in private-house work the majority of housekeepers prefer the pull-chain sockets to the door switches.

Yours truly,

W. CREIGHTON PEET,
President Peet & Powers, Inc.,
New York City.

Getting the Farmers to Celebrate Their Farm Electric Plant Purchases



No dealer in low-priced automobiles was ever able to get 300 farmer customers to gather in and celebrate their purchase. Electric farm plant dealers have staged such celebrations. Doesn't this indicate something of the manner in which electricity becomes an intimate part of the lives of its users?

These so-called farm conventions have been staged in several parts of the country by live county agents of the Delco Light Company. At such functions it is the usual practice for the county agent to invite all of his customers and such prospective cus-

tomers as he may care to include to come to town for the day. He arranges for a parade and speeches from the town mayor and "constable." Several service men also speak to the farm plant users on up-keep methods.

And then, of course, there is a parade and a brass band. The dealer usually provides the eats at noon and buys out the local moving picture show for the benefit of his patrons.

Is it good business? That is the question the dealer immediately asks himself. Delco men say it is.



Ideas for the Man Who Sells



Help the Farmer, and He Will Help You

By H. W. YOUNG

President Delta Star Electric Company, Chicago

Public utilities are face to face with a high-rate money situation, and financing of new projects or extensions has for months been difficult. Many of the utilities' former sources of "ready cash" have been closed by the abnormal demand for money by commercial enterprises which could offer a high rate of return—and recoup themselves by simply increasing the selling price.

But utilities with their fixed rates cannot ignore costs and must seek new avenues to sell securities. As a result witness the selling of securities by employees who are disposing of them in small lots, by the partial payment plan, etc., to their friends and customers. These are all steps in the right direction.

The big field, however, has been overlooked by the average utility, and this fact is one of the strangest things to understand. Just why utilities should keep their eyes glued to "far financial pastures" and not see the fertile field at their doors is one of the peculiar angles in the present financial game. Regardless of present high prices, we must eat. We can wear overalls, and wear out our old clothes—but it will be a long time before we can resort to the garbage pile for food.

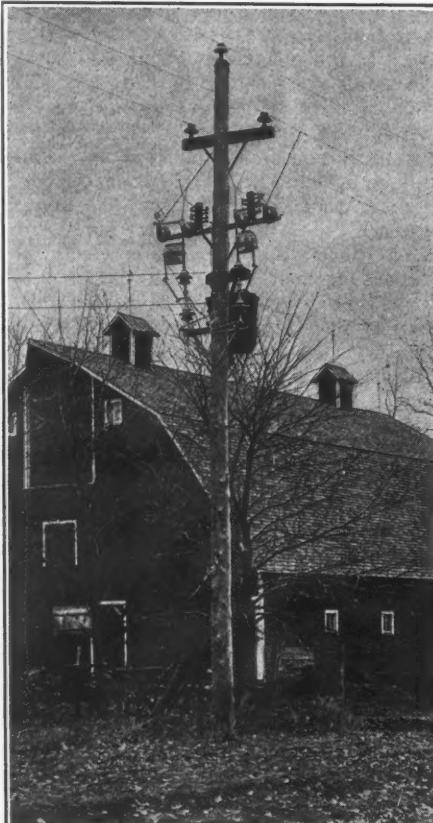
We Cannot Get Along Without the Farmer

We need the farmer. We cannot get along without him. He is the primary producer of raw material. We can get along without the other raw material, but food we must have. The farmer is the boy who sits on the top of the world under any business conditions—he fears the weather only. As a result he builds up a bank balance, steadily and surely. In short, the farmer has the money. Eventually his money gets to Wall Street and utilities are forced to pay high rates for this money—if, indeed, they can get it at all.

Plans, Schemes and Methods Gathered from Successful Selling Experience to Increase the Sale of Electrical Appliances

Why should we not raise our money first-hand as the farmer does his products?

Go to the farmer for your money. He will meet you more than half way. You can get it cheap—you have the lever that will open his purse. Give him electric power and



"Go to the farmer for your money," is the advice given to central-station men by the author. "The farmer will meet you more than half way. You can get money cheap. You have the lever that will open his purse. Give him electric power and light service. He will give you financial aid in building the lines, and he will invest in your securities."

light service. He will give you financial aid in building the lines and he will invest in your securities.

Another thing—you may not contemplate crossing his farm at present—but keep it in mind, and when you give him service, secure at the same time his option to cross his property at even a future time. A

little co-operation at the right time will save right-of-way expense in the future.

There is a vision of their farm-line possibilities that utilities can use to advantage. It will help utilities get back to earth again. The world's all right—but the turn in business has come. Protect yourself and line up with the farmer.

"Wouldn't Farm Again Without It!"

The *Missouri Farmer* recently sent a questionnaire to 300 farm-plant owners in Missouri to ascertain whether or not such plants pay.

Among other questions was asked, "Would you go back to farming without one?" About 60 per cent of those answering this question firmly stated "No." Others replied, "Certainly not," "Couldn't do without it," "Never" and "My wife wouldn't." There were none who said that they would farm again without a farm electric plant if they could help it.

In answer to the question, To what uses do you put your plant? the following interesting percentages were developed:

	Per Cent.
Pumping water	60
Washing machine	48
Ironing	40
Electric fans	32
Vacuum sweeper	25
Cream separator	24
Churning	16
Electric milker	14
Grinding feed	12
Grindstone	8
Fanning mill	4
Sawing wood	4

Pittsburgh Radio Telephone Heard in Arizona

Word has been received from Meade W. Powell of Warren, Ariz., a distance of 1,600 miles from East Pittsburgh, to the effect that he receives clearly, every night, the entertainments sent out from the experimental wireless telephone station of the Westinghouse Electric & Manufacturing Company at East Pittsburgh.

This is the farthest distance from which a report has been received at East Pittsburgh of hearing the program which is sent out each night from the experimental station.

Tom Casey on Feminine Psychology and the Art of Selling a Washing Machine

Thomas J. Casey, that authority on the feminine mind and ways of getting feminine eyes to smile with favor on the electric washing machine, has been giving out generous chunks of knowledge on his pet subject, as one of the speakers of the General Electric and Allied Merchandising Conference. This conference is now touring the country, reaching electrical dealers in every important city with its "better merchandising" ideas. Mr. Casey, who is vice-president of the Hur'ey Machine Company, discourses in part as follows:

"The greatest merchants in the world realize that they cannot sell to Mrs. Jones and Mrs. Brown and Mrs. Smith while they are walking along the street. They must get those women into the store to see the merchandise and talk to them before they can induce them to buy.

"When people come into your store, what are you doing to get their business? What are you doing to sell goods to them? Are you calling their attention to any new devices that you may have? Are you letting them walk out? Let's take a washing machine, for example.

"Let us assume that we have an electrical store and that Mrs. Jones walks into the store to buy an article. She looks at the washing machine—she just glances at it. She buys a lamp socket and walks out. She is allowed to walk in and out.

Reaching the Casual Customer

"There is another store in the same city. The washing machine is in the middle of the floor. Mrs. Brown comes into the store to buy a lamp socket. As she walks out, the salesman walks along with her, and when they get to the washing machine he says: 'Mrs. Brown, how do you do your washing at home?' And Mrs. Brown tells him, of course, how she does it. Her answer will determine what the salesman is going to say next. Let us assume she says: 'Well, I have a woman come in to do the washing.' 'She does it by hand?' 'Oh, yes.' 'Let me show you how this machine runs.' Mrs. Brown is not going to say, 'No, I am not interested. I do not care any-

thing about it.' Nine times out of ten she will stop for a few minutes, at least, to find out how the washing machine works. Get the point?

An Open Sesame—The Woman's Curiosity

"The salesman has told her that he wanted to SHOW her how the machine does the work. He has aroused her curiosity. She will stop to look at the machine because she is interested in the method, in the system that is used to take the dirt out of the clothes. He does not say to her, 'Are you interested in washing machines? Won't you stop for just a few minutes to look at this machine?' He says, 'Mrs. Brown, let me show you how this machine does the work.'

"You can travel all over and you can question every woman you meet, and you will find that out of the number who have washing machines and have been using them in their own homes but a small percentage can tell you how the machine works, how it washes the clothes. And yet they are all interested. The woman who never had a washing machine will stop every time to look at one if the salesman tells her he wants to

A Machine that X-Rays Feet While Fitting Shoes



Most people's feet are ruined by ill-fitting shoes between the ages of 6 and 16, and probably every mother would welcome a machine in her shoe store that X-rayed her child's feet to show whether the new shoes fitted. You can't always tell by the "feel" of a shoe whether it fits. Besides, many a little girl who wants "stylish" shoes will deliberately mislead her parents as to the fit of the shoes. But if she has to put her feet in the new "Foot-O-Scope," made by the X-Ray Foot-O-Scope Corporation, Inc., 100 Boylston Street, Boston, the mother and salesmen can have at a glance an X-ray view of the feet, bent, twisted or crowded bones, cramped or compressed parts, etc. The machine is designed especially for shoe stores, is finished in mahogany, weighs not quite 200 lb. and sells for around \$900. It is controlled by a foot switch of the sewing-machine type.

explain how it does the work. Because, down in their hearts, most women suspect it will not wash the clothes until they have tried it. Still, they want a good reason to think that it will, because they want one.

"The same thing is true of an ironing machine. You would be surprised at the number of salesmen who do not know how an ironing machine does the work. When you iron with a flat iron, you get results by forcing the iron against the cloth. When you iron with a machine, you have the machine forcing the cloth against the iron. It sounds simple enough, and yet some of the men who are representing the factories, who sell ironing machines, have not figured that out for themselves, not even after selling them for years.

Essentials of Good Salesmanship in Dealing with Women

"They have never considered that the woman who is going to buy an ironing machine wants to know something about how it works, the results it is going to produce, and how it produces these results. She is not satisfied with the plain statement that it will do the work. She wants to know the why and wherefore, and if you can give her the details, if you can explain the principle, then you are merchandising; then you are a real salesman."

"Be Proud of the Thing You Sell—Yours Is the Best Business in the World!"

"I can remember the time, when the automobile business was organized, and a salesman would come selling automobiles, how the man who was selling ribbons behind the counter in a dry goods store would look at him kind of funny," says C. S. Beardsley.

"Selling automobiles? Oh, my, that was awful! There was a time, too, two or three years ago, when a man selling vacuum cleaners couldn't get any other job. But it isn't so now. That is the one thing I want to get to you salesmen—the fact that you are all in the best business I know of today, not only for making money—that isn't it—but for giving service in the home. And you may be proud and dignified, because of the fact that you are selling vacuum cleaners.

"It used to seem almost a disgrace to put a vacuum cleaner on your

back and go out and sell it. I used to have an assistant sales manager who went out with his cleaner packed in a sample case, with a three-piece handle. He gave it to the porter to take up to the hotel and shoved it under his bed. He was ashamed of the fact that he was selling vacuum cleaners—that's a fact. He isn't with us any more."

Does Your Store Carry "Everything Electrical from A to Z"?

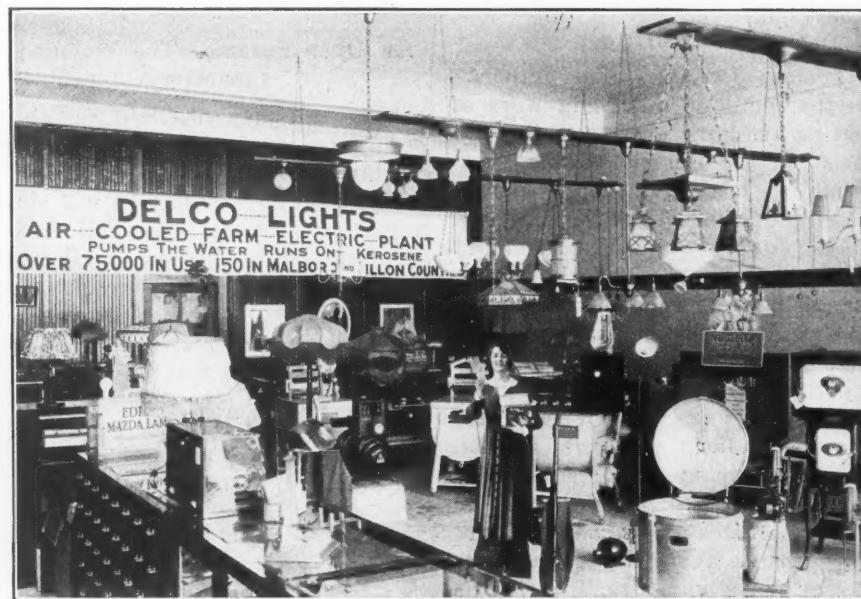
Carrying out its slogan of "Everything Electrical," a dealer in New York City prints in a neat box on the backs of its cards a list of all the appliances it carries, with the reminder that demonstrations may be had at the salesroom or at home. The list is headed, "Everything Electrical—from A to Z," and is as follows:

Air heaters	Luminous radiators
Bakeovens	Mazda lamps
Bed lamps	Milk-bottle warmers
Broilers	Motors
Candlesticks	Percolators
Chafing dishes	Plate and food warmers
Christmas tree outifts	Portable lamps
Cigar lighters	Pottery lamps
Coffee machines	Ranges
Comb dryers	Radiant heaters
Combination table sets	Radiators
Curling irons	Refrigerators
Desk lamps	Samovars
Dish stoves	Sauté pans
Dish-washing machines	Sewing machines
Egg cookers	Shaving mugs
Foot warmers	Sterilizers
General utility motors	Table decorations
Griddles	Table ranges
Grills	Tea kettles
Heating pads	Tea pots
Hair dryers	Toasters
Immersion heaters	Vacuum cleaners
Irons	Vibrators
Ironing machines	Washing machines
	Water heaters

Purdue Experiments with Electricity in Floriculture

The agricultural experiment station at Purdue University has announced results from recent tests which may prove of great value to florists and flower raisers generally. The experiment consisted in using electric lamps during cloudy weather to prevent "bud drop," sweet-pea plants being selected as those on which to make the trial. It had been found, according to R. D. Brown, who had charge of the work, that the buds began to drop Jan. 24 during a period of dark weather and they continued to drop during the cloudy period until Feb. 8, when a 100-watt lamp was placed above the twelve plants used in the experiment. Twelve flowers were picked from these plants on Feb. 10. On Feb. 13 five out of the twelve buds had a

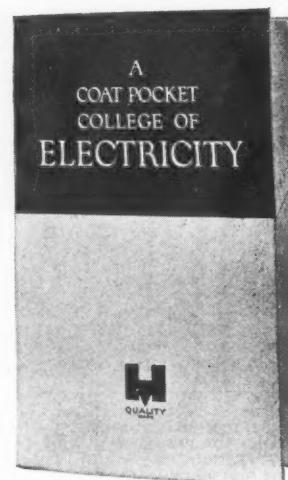
Farm-Plant Dealers Must Carry Variety of Appliance Lines



The dealer who sells farm-electric power plants must provide to stock not only the plants themselves but the many accessory devices and appliances which are operated from the farm-plant circuits, and which the farmer-customer will eventually demand, after he has purchased his lighting set itself. The varied lines of appliances:

full blossom, while none of the buds without the artificial light had developed any color. Further experiments are to be conducted.

Edison Electric Appliance Starts Salesmanship School



Write for this prospectus, if you want further information about this course.

To meet the new conditions arising from the pressure of competition and the awakened sense of thrift of the buying public, and to provide better and more intensive methods of selling, the Edison Electric Appliance Company, 5600 West Taylor

Street, Chicago, has launched a school of salesmanship. This school is for the use of all engaged in the selling of any kind of electrical appliances, says J. F. Roche, advertising manager of the company, and tuition is free. It covers the principles of salesmanship and advertising and the fundamentals of electricity and includes window trimming, store management, direct mail campaigns, and so on. Within the past two months 2,000 have enrolled, though very little publicity has been given to the school, and the company expects that the enrollment will be as high as 30,000 among its own dealers, central stations and jobbers. The scope and interest of the course is set forward in the prospectus, "A Coat-Pocket College of Electricity." John B. Mannion, formerly correspondence counselor of the La Salle Extension University, is supervisor.

If Your Competitor Lays a Man Off—Hire Him!

Now and then we hear of some dealer or jobber who is laying off some of his salesmen or office force, fearing bad business weather ahead. The man your competitor is letting go is a good man for you to hire right away and start to selling hard! We've got to keep all the *good electrical salesmen selling*, now!



Hints for the Contractor

*Ideas on
Estimating, Stock Keeping,
Shop and Construction Methods,
Repairs and Maintenance,
and Collections*

Detroit Wages Adjusted on Basis of Index of "Cost of Living"

SOME fundamentals were laid down in the decision just made public of the Council on Industrial Relations for the Electrical Construction Industry regarding the Detroit electricians' wage controversy. The employing electrical contractors had cut union wages in January from \$1.25 to \$1 per hour, on the ground that non-union shops were paying under \$1 per hour and therefore were making competition too difficult and because the cost of living was much lower. The union men refused to accept the cut and denied the two statements above given.

The matter finally came before the Council for settlement, and the Council took the stand that the men were entitled to as high a standard of living as they enjoyed prior to war conditions, or in 1914. This standard was felt to be commensurate with the then current wage, or \$4.56 per day. In addition, the Council accepted the figures of the National Industrial Conference Board that 79.6 per cent of a workman's budget is for subsistence and 20.4 per cent for other purposes. The Council then took the commodity index of the Bureau of Labor Statistics for the twelve months from Dec. 1, 1919, to Dec. 1, 1920, and applied the increase over the 1914 index to 79.6 per cent of \$4.56, leaving the remainder the same. On this basis a daily wage of \$10 was determined, and consequently it was held that the old wage should obtain until July 1, 1921.

Is to Workman's Own Interest to Be Efficient

The Council was not inclined to give much weight to the matter of union and non-union labor competition. It did, however, state quite strongly that a union workman receiving the high wage owed it to himself as well as to his employer to work more efficiently and do more work than he has been accustomed to do in the same time. The Council was also not in favor of having wage changes on the hour basis. It felt

that a workman was interested more in the yearly income and that this was not considered in the hour scale. While the Council was forced to exclude consideration of employment security, still it felt that a fair wage "is one which, upon an assumption based on statistics as to the duration of employment, will satisfy as nearly as possible all the workers' needs. The adequacy of the wage to satisfy all of the workers' needs is regulated by the cost of living."

Southern Idaho Electrical Contractor-Dealers

An association of electrical contractors and dealers of Idaho, to be known as the Southern Idaho Electrical Dealers' Association, has been organized at an enthusiastic convention of a large number of representatives of the various Idaho branches of the electrical industry, held at Twin Falls, Idaho.

The following officers were elected: Harvey Ball, of Burley, president; Walter Bauchmann, of Idaho Falls, vice-president; B. J. Hetherington, of Boise, vice-president; P. H. Bullock, of Weiser, vice-president; Harry Dinkelacker, of Twin Falls, secretary and treasurer.

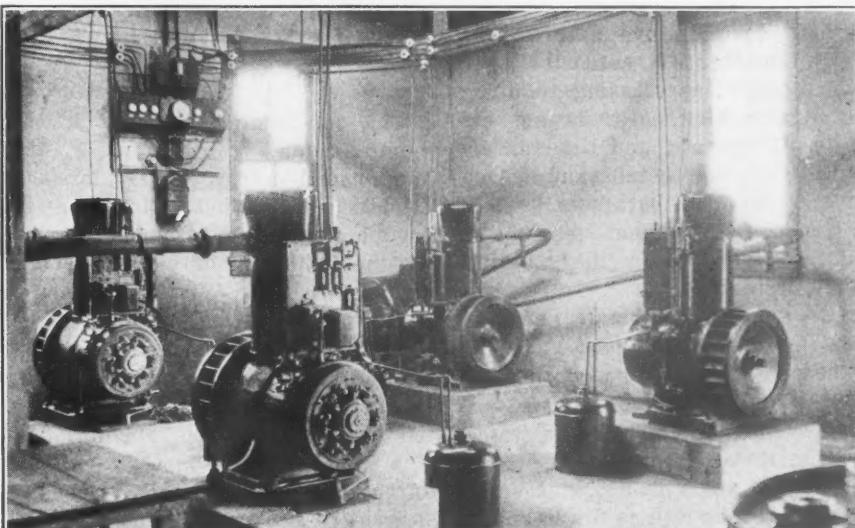
It is felt that this organization will do a great deal toward promoting the get-together spirit among the electrical fraternity, and will insure better service to the public. It has been started off with great enthusiasm, and is the first organization of its kind that has been formed in the state of Idaho for a long time.

All of the local jobbers were present at the meeting, as well as a representative of the Montana Electric Company, and representatives of several of the manufacturers.

The delegates were guests of the Twin Falls dealers and electrical workers at a ball, and the Idaho Power Company entertained them at a banquet.

The next meeting of the association is to be held in Boise, Idaho, on Sept. 4 and 5, 1921.

Lighting a Village with Farm Power Plants



The village of Dunning, Neb., is lighted by four 3-kw. farm-plant units and a 56-cell battery of 160 amp.-hr. capacity. The plant, installed complete with outside lines, cost about \$6,000, not including the power house building or the meters for customers. Ten 100-watt street lamps are operated for the village, and the customers of the plant use electric pumps, motors, washing machines, fans, flatirons, etc. "In fact," ex-

plains P. Wilson, chairman of the Dunning village board, "the service is so popular that we have a day-load sufficient to keep one unit running profitably all day long and we only draw from the battery for current used between midnight and morning. Energy is sold at 20 cents a kilowatt-hour, and I think I am safe in saying that every man, woman and child in Dunning is a booster for electric light!"

Spring's Raw Days Are Here —Are You Ready to Install Electric Heaters?

"In the home electric heat is principally used for supplementing the established heating system," says a new leaflet, "Electric Heating of Air," being distributed by the Cutler-Hammer Manufacturing Company, Milwaukee.

"The electric air heater, for instance, will prove useful especially in the raw days of early spring, when there is no furnace fire. Many persons suffer positive discomfort from the unpleasant odors of gas and oil heaters and from the vitiating effect these open-flame heaters produce on the atmosphere of a room. This effect is even more serious in the case of infants and invalids, to say nothing of the nuisance of filling and cleaning oil heaters and the danger inseparable from the use of any type of heater that burns with an open flame.

Electric Heat Is Clean and Healthful

"Electric air heaters are free from all the objections mentioned. They require neither filling nor cleaning. They are smokeless and odorless. They neither pollute nor vitiate the air.

"The heating element is entirely inclosed so that nothing inflammable can come in contact with it. The heater is always ready for use. A turn of the switch and it is in operation. Another turn of the switch and the current is cut off. Used intermittently, as occasion requires, the electric air heater is not expensive to operate, and the comfort derived from the installation of such a heater in a cold bathroom or bedroom more than compensates for the moderate increase in the monthly electric light bill.

"Large industrial plants and factories find electric air heaters useful in heating crane cabs, outhouses, valve, pump and meter houses, exposed remote corners or rooms, watch or signal towers, for shearmen and tablemen in steel plants, in theater ticket booths, as well as for scores of miscellaneous applications. Flexible electrical conductors will carry electrical heat cheaply and at the same time efficiently to the most inaccessible points.

"Air heating has proved to be such an exact science that careful

calculations involving many factors are necessary to determine the amount of energy required in special cases. For rough estimates, however, the following thumb rules are sufficient:

THUMB RULES FOR FIGURING ELECTRIC HEATING

"0.35 watts per cubic foot (see A).
"Plus 3.5 watts per square foot of wall area (see B).

"Plus 35 watts per square foot of glass area (see C).

"A—This takes care of the heat required for raising the temperature of the air approximately one complete change of air an hour. For more frequent changes, increase the wattage proportionately.

"B—This takes care of the loss of heat through the walls. In figuring the wall area, the area of the four sides of the room and the ceiling and the floor are all included and a deduction is made for the glass area. The rule assumes good building construction, such as a good 12-in. brick wall or a well-made double-frame wall.

"C—For measuring glass area, the over-all area of the frame is measured and this area is deducted from the total wall area.

"The above rule assumes a temperature elevation of 70 deg., or, in other words, external temperature of zero, room temperature of 70 deg. If the room adjoins other heated rooms, allowance must be made, based on the difference in temperature between the room under consideration and the adjoining rooms.

"This thumb rule is for rough estimates only. It will agree quite closely with more complicated calculations in some cases, but, on the other hand, there may sometimes be a considerable error, so that it must be used cautiously."

Contractors Vote Affiliation with Master Builders in Wisconsin

The outstanding features of the fourth annual convention of the Wisconsin Electrical Contractors and Dealers' Association in January was the adoption of a resolution favoring the affiliation of electrical contractors with the Wisconsin Master Builders' Association, either by joining the State organization or where possible through local city chapters. The spirit of co-operation was further evidenced by the appointment of a committee to meet with the March convention of the Wisconsin Electrical Association with instructions to work for the fullest possible understanding and co-operation between the central station management and the contractors and dealers in every city.

An inspiring address full of helpful suggestions was the general

opinion of the talk by E. E. Garlitz of the Westinghouse Electric & Manufacturing Company, who substituted for Samuel A. Chase.

The members were kept on their toes during the entire two days of the meeting, and as a little relaxation before going home a banquet and dance was arranged at the close of the last business session. Chairman B. L. Burdick, Burdick Electric Company, Milwaukee; Secretary H. M. Northup, G. O. Electric Company, Milwaukee, and Treasurer John L. Aker, Aker Electric Company, Sheboygan were re-elected.

Tri-City Contractors Discuss Co-operation with Central Station

B. J. Denman, president of the Tri-City Railway & Light Company, Davenport, Iowa, addressed sixty Tri-City electrical contractors and dealers at the Davenport (Iowa) Chamber of Commerce in February on the topic "Co-operation Between the Central Station and Contractor-Dealers." Mr. Denman's presence and address were the result of an organized movement of electrical contractors and dealers of Davenport, Iowa, and Rock Island and Moline, Ill., to develop the local industry by means of "get-together" meetings.

In January a committee of five was appointed by the contractors and dealers to study and devise creative plans along which the organization should progress. The committee decided that the first move would be to seek counsel from the president of the largest electrical concern in the Tri-Cities, namely the Tri-City Railway & Light Company.

Mr. Denman emphasized the fact that electricity in the home was no longer a luxury but a necessity and that its importance to industry had not yet been fully developed; in fact, hardly touched upon. He also called especial attention to the fact that rates for electric service had not increased during the war to any perceptible degree and that the average bill per consumer was only \$20 a year. He furthermore commented upon the fact that adequate rates were essential to the maintenance of proper service and that the consumer should pay somewhat higher rates so as to receive the best of service. Following the address was a general discussion of the topic by the contractors present.



The Rolling Stone

It is an old saying that "a rolling stone gathers no moss," and sometimes we laugh at the old proverbs and adages of our forefathers and claim that times have changed since then.

Times have changed, but principles have not, and as long as rolling stones continue to roll they will continue to gather no moss. The here-today-and-gone-tomorrow chaps find that they do not stay here long enough to accumulate today anything to take with them when they go tomorrow.

The salesman inclined to shift about from house to house reduces with each shift the likelihood of settling down into a permanent position. He develops a migratory habit and that habit grows upon him. He becomes a tramp salesman, going from one job to another, without regard for the advantages of any. This leads to his looking like a veritable tramp, because he is not able to get enough salary anywhere to keep him looking respectable.

The Man Who Is Constantly Changing Employers

He finds himself passed along by the men to whom he applies for positions, because they know of his character and they fight shy of a man who is constantly changing employers. They know he cannot become really valuable to any one in the short time he stays with them, and just as soon as he begins to be worth something he flits to another place.

It is obvious too that a salesman who does not remain long enough with a house to represent it intelligently cannot develop any very great feeling of loyalty to the concern. He just begins to be a part of the organization when he "up and leaves."

What the Anvil Seems to Say

The man who sounds the anvil in his selling talk and knocks the other fellow's vacuum sweeper, clothes washer or other device has missed the point by forty rods. For the average customer comes in not to

The Jobber's Salesman

*Ideas Which
Other Men Have Used
to Help Them Sell Goods
and to Build Better
Dealer-Customers*



What About Automobiles for Jobbers' Salesmen?

By S. N. CLARKSON

make technical comparison, but just because she wonders if electric washers wash clothes clean. She wants to see how "these electric sweepers work," and she assumes that they are all about the same.

Then is the time to build up confidence in everything electrical. All kinds are good. Yours has its own particular advantage, that's all.

Knock, and she feels that there must be great risk in buying these appliances if any one of them can be so full of faults. Boost, and she sees how good your own must be to lead them all.

It pays to boost, therefore, not just because it helps the industry, rather because it makes each individual customer more sure and ready to buy.

The anvil always seems to say, "Watch out!"



What Pep Is

Vigor, vitality, vim and punch—
The courage to act on a sudden hunch,
The nerve to tackle the hardest thing,
With feet that climb and hands that
cling,
And a heart that never forgets to
sing—

THAT'S PEP.

Sand and grit in a concrete base,
Friendly smile on an honest face,
The spirit that helps when another's
down,
That knows how to scatter the darkest
frown,
That loves its neighbor and loves its
town—

THAT'S PEP.

To say "I will," for you know you can,
To look for the best in every man,
To meet each thundering knockout blow
And come back with a laugh, because
you know
You'll get the best of the whole darned
show!—

THAT'S PEP.

Jobbers in the Middle West find, as a general rule, that it is better for their salesmen to travel by automobile when roads are good and train service is bad, although if frequent train or interurban service is available it is preferable to use rail transportation. Roads are so poor in the South that automobiles have been found impracticable in that section. Records obtained with certain low-priced cars show that the distance which can be traveled with such a machine varies from about 10,000 to 35,000 miles, with an average of about 15,000 miles. This depends somewhat on the driver, but, other things being equal, it depends on the roads. For instance, in West Virginia not more than 10,000 to 15,000 miles could be obtained per machine, whereas in Indiana, Ohio and Kentucky the same make of machine would do 35,000 miles.

There seems to be an absolute lack of uniformity in the matter of handling the expense. One jobber pays a salesman a percentage of the profits from his territory, whether the salesman sends in the order or not, and pays the salesman \$400 a year depreciation on his automobile. The salesman buys the machine, pays all his traveling expenses, including the upkeep of the machine, and he is required to carry full insurance. Another jobber has a similar plan except that he pays the salesman 6 per cent on the money invested in the machine and pays the depreciation in a lump sum when the car is sold or traded in for a new machine. Other jobbers pay salary and commission plus expenses, and when an automobile is used for transportation a monthly allowance is made at a flat rate or on a mileage basis. Where depreciation is figured on a mileage basis 3 cents per mile has been used in a number of cases.

Where the use of automobiles is practicable the machines make it possible for the salesman to work his territory more intensively. He can make more calls and more towns with

a machine than when traveling by train, but the increase in business is not always in proportion to the larger number of calls. In most sections of the Middle West where salesmen use machines the weather only permits their use about nine months out of the year, and the change of transportation methods often causes temporary disarrangement.

Arranging the Vacation Schedule

The difficulties of arranging a vacation schedule in a company employing hundreds of salesmen and clerks has led to the adoption of a novel schedule by the jobbing interests of San Francisco. It was found that a division of time so that not too many employees should be absent at one time spread the vacation period over several months, during which time the company's work was always below the highest efficiency. The office of the Western Electric Company of that city, therefore, adopted a system of all employees taking a vacation during the same two weeks. This has later been adopted by other wholesale distributors, so that no one house has the advantage over the other.

It has been found that customers readily accustom themselves to such inconvenience as may be involved in this two weeks' absence. Of course, due warning is given them, and enough of a staff is maintained to answer telephones and to handle emergency matters. The present arrangement has many advantages. It obviates the difficulty of suiting all tastes and still maintaining precedence in the matter of choice and it secures a period of especial efficiency on the part of all following the vacation time, when every one is rested. After having followed this practice for several years, the wholesalers are greatly pleased with its working out and recommend it to other employers.

The N. E. C. A.—Business Insurance for Manufacturers and Jobbers

Here is why the work of the National Electrical Credit Association is of practical importance to electrical business men.

Eight hundred electrical manufacturers and jobbers are today interchanging ledger facts and actual credit experience through the use of

a simple time-saving system which has been in effective operation since 1896.

A semi-weekly information service regarding slow and no-pay customers offers a practical safeguard against preventable losses.

The names of 10,000 doubtful credit risks are included in a Monthly Bulletin.

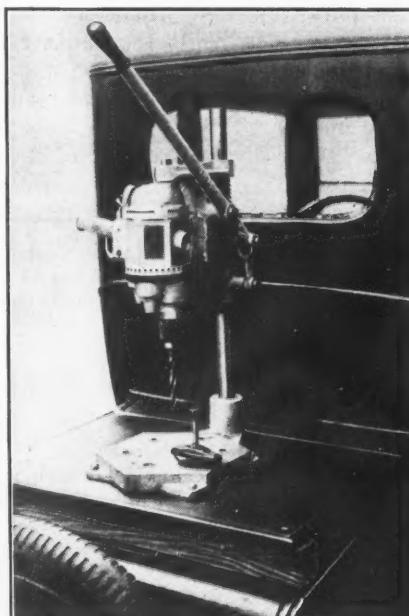
Timely credit and collection tips, with practical credit information, are found in a monthly publication, "The Viewpoint."

Free credit-inquiry blanks give access to credit data which has been accumulated during the last twenty-five years.

Cost

There are no fees or commissions—there are no assessments—the association is not a collection agency.

An Idea for Increasing Industrial-Device Sales



Here is the way Fritz Kline, salesman for the H. C. Roberts Electric Company, Philadelphia, Pa., mounted a bench-drilling stand on the rear of his Ford coupe. In making his calls on garages, Mr. Kline runs his car right into the garage, plugs in at the nearest electric-light socket, and demonstrates the bench-drilling stand. In one week he secured orders for six bench-drilling stands and four drills.

Owing to the incline of the rear deck of a Ford coupe, a piece of 2 x 4 timber slightly longer than the width of the opening was placed across the opening underneath the cover, so as to bring the cover to a level position.

The bench-drilling stand and drill are protected from dust and the weather when the car is on the road by means of a simple slip cover made from automobile-top material.

Charlie Katz, salesman for Gaul, Derr & Shearer, did not mount the bench-drilling stand on the rear of his car, but carried one with him in his car, and lifted it out and demonstrated it on the prospect's work bench, with the result that he secured orders for two bench-drilling stands and two portable electric drills the first two days.

The association is maintained by dues, payable semi-annually.

Details will be gladly furnished by the secretary of the association in the territory in which your office is located.

Organization

The National Association covers the entire United States, and is composed of six mutual organizations:

New England Electrical Credit Association, J. A. Loring, secretary, 161 Devonshire Street, Boston.

New York Electrical Credit Association, W. J. Kreger, secretary, 47 West Thirty-fourth Street, New York City.

Middle and Southern Atlantic States Electrical Credit Association, J. W. Crum, secretary, Land Title Building, Philadelphia.

Denver Electrical Credit Association, D. F. Lowe, Barclay Block, Denver.

Electrical Credit Association—Central Division, F. P. Vose, secretary, 1347 Marquette Building, Chicago, Ill.

Pacific Coast Electrical Credit Association, A. H. Elliot, secretary, 501 Flatiron Building, San Francisco.

A Love Story

He was just a regular sort of fellow. There was nothing about him that made the boss pick him for a winner, nor was there anything about him that made the boss want to fire him.

He came in at seven-thirty every morning. You could set your watch when he entered the office. He came and went with a precision that would make a chronometer jealous. He was never in the way. He did what he was told to do, and nothing more, even if he had to sit idle.

He never got angry. If things in his department went wrong it didn't bother him in the least bit. He seemed to feel that it was up to his boss, the department head, to do all the bothering.

If his department made a particularly good showing he didn't throw his hat in the air and give a yell and offer to buy a coca-cola for the crowd—not by a long shot. He simply continued his work.

And then suddenly and without warning he fell in love!

And, gracious, what a change!

He startled the office by showing up ahead of time, and more by putting some "pep" into his work. Twelve o'clock would come along, and twelve-thirty, and there he'd be plugging away at his desk.

He made a whole lot of suggestions about his work and the work of the department, and of the whole organization. And good suggestions, too!

He stuck around the office every night until the watchman put him out, and then he would take some work home. When his department was away ahead with the work he gave a whoop of joy that sounded like a Comanche Indian.

And just because he had fallen in love.

With a mere girl? No, no. You are all wrong. He fell in love with his job.

—Texas Utility News.

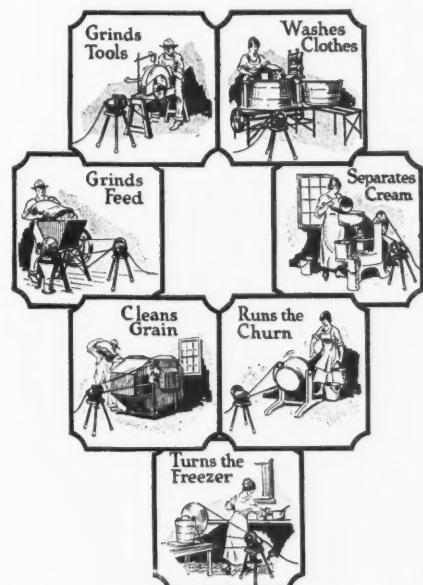


Sales Helps for the Dealer



"Do Your Chores Electrically"—A New Folder for the Farmer and His Wife

A portable power stand that the farmer can carry around from one job to another and use to operate much of the farm equipment he already possesses is the subject of the new Westinghouse folder, "Do Your



Some of the daily tasks of the farmer and the farmer's wife, lightened by the use of the portable power stand, as illustrated in the new Westinghouse folder, "Do Your Chores Electrically."

Chores Electrically." The power stand, it is pointed out, will turn the grindstone, the feed grinder, the corn sheiler, the fanning mill, and water the stock. For the farmer's wife, it will wash clothes, separate cream, churn butter and freeze ice-cream. Eight drawings in the folder picture the farmer and farmer's wife at these tasks. A mailing card for the farmer is attached, which may be imprinted with the name and address of the dealer who avails himself of this service.

From Yachts to Churches—Power and Light!

In a new leaflet which the Allis-Chalmers Manufacturing Company of Milwaukee is issuing on its 15-kilowatt gasoline engine-driven generating sets, the following interesting

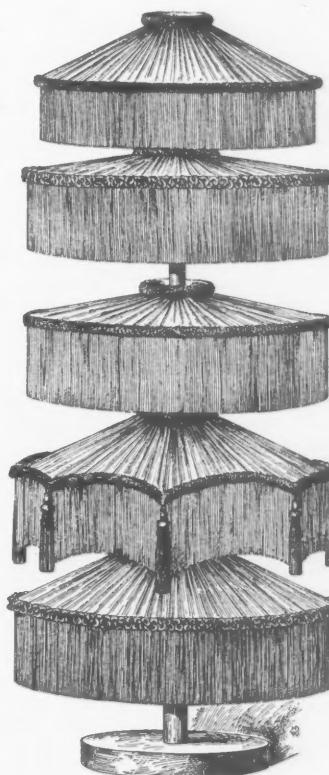
Show Window, Counter, Mail Advertising and Specialty Aids Which Manufacturers Offer to Help You Get More Trade

list is given, as showing the possible field for the plant. Check them over, and see how many of them come within your own field of operations:

Hotels	Contractors
Schools	Warehouses
Churches	Factories
Stores	Machine Shops
Yachts	Wireless Stations
Moving Pictures	Logging Operations
Traveling Shows	Work Boats
Summer Resorts	Hoists
	Large Farms

showing the actual increase in yearly egg production in their hen houses under artificial light.

A Silk Lamp Shade Stack that Saves Time and the Shade as Well



More About Electric Light in the Poultry Barn

Just what intensity of electric light to have in the poultry house, to get the best results in winter egg production, can often be learned only by experimenting, but the Domestic Electric Company of Cleveland, Ohio, is issuing a helpful booklet entitled "Facts About Illumination," designed to answer many of the questions of both the farmer and the farm electric dealer. The booklet tells of the experiments in artificial light applications in poultry houses conducted at the New York State College of Agriculture at Cornell University, which resulted in the college's endorsement of the plan.

More recently, the proper intensity of light to be used in the poultry house has been the subject of similar experiments, and of these Professor James H. Rice of the college is quoted in the Delco book as saying:

The amount of light to be supplied will depend, to a large extent, upon the nature of the building, the height of the light from the floor, the color of the walls, the intensity of the light and as to whether or not reflectors are used. Generally speaking, a floor space of about twenty feet square will require two 25-watt Mazdas or one 50-watt Mazda lamp, suspended five or six feet from the floor and having a comparatively flat reflector, twelve to fourteen inches in diameter, assuming that the walls are white.

"What practical poultrymen say" about electric light in hen houses is also told in the booklet, in excerpts from letters from poultrymen, some of whom kept records and give tables

A lamp shade stack that effectively displays silk lamp shades without crushing, soiling or kinking the fringes has been brought out by the Charles V. Daiger Company, 34 Columbus Avenue, Boston, Mass. The stack is built up with extensions for any number of shades, each extension resting on the one beneath, the shades thus being displayed one over another. It simplifies the process of selection for both the customer and the salesman, and when a shade is finally selected it is easily removed without disturbing the others.

To Display the 70-50 Switch

On-the-counter displays account for an astonishingly large percentage of small sales in drug stores, five-and-ten-cent stores and department stores. Small articles in the electric shop, too, sell best when displayed on counters, and for this purpose the Cutler-Hammer Manufacturing Company, Milwaukee, is distributing a new metal display cabinet just large enough to display, under glass, ten C-H 70-50 switches.

The Clothes Washer a Woman Selects

What are the things a woman looks for in the electric washer she selects? What makes the first superficial appeal, and what are the most reasoned points that finally decide the result of the process of selection? A clever answer to these questions in the dealer's mind, that at the same time answers many unspoken questions in the woman buyer's mind, is contained in the new booklet of the General Railway Signal Company, Rochester, N. Y., entitled "Why I Selected the G. R. S. Electric Clothes Washer."

The booklet has a dainty two-color cover, and the story it contains is a woman's own story, told to another woman, of why she selected the washer. On each right-hand page is a full-page color picture of the two women discussing the washer, with the fortunate housewife indicating the various parts of the machine under discussion. In the order of her own talk, the things that attracted her in the washer were:

Its neat appearance; its simple, safe and convenient control; its substantial durability; the washing principle; its safety features; its swinging and removable wringer; its silent operation; ease of maintaining its cleanliness. In other words, though its appearance makes the first impression, seven other points help to decide the selection.

Record of Lighting Fixture Patents

Issued from Feb. 8 to Feb. 22, 1921, Inclusive

COMPILED BY NORMAN MACBETH
Consulting Illuminating Engineer, New York City

Design Patents

The following are ALL the design patents pertaining to lighting materials, issued by the U. S. Patent Office, from Feb. 8, 1921, to Feb. 22, 1921, inclusive.

57,098. **Handle for Electric Switches.** Carl Eric Anderson, Stratford, Conn., assignor to the Bryant Electric Company, Bridgeport, Conn. Filed Jan. 23, 1920. Issued Feb. 22, 1921. Term of patent, 14 years.

57,102. **Inverted Angle Socket.** Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed Aug. 7, 1920. Issued Feb. 22, 1921. Term of patent, 14 years.

57,103. **Plug Socket.** Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed Aug. 7, 1920. Issued Feb. 22, 1921. Term of patent, 14 years.

57,104. **Current Tap.** Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed Aug. 7, 1920. Issued Feb. 22, 1921. Term of patent, 14 years.

57,105. **Husk.** Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed Aug. 7, 1920. Issued Feb. 22, 1921. Term of patent, 14 years.

57,161, 57,162. **Wall Bracket for a Lighting Fixture.** George V. Strahan, Newark, N. J., assignor to Mitchell Vance Company, Inc., New York, N. Y. Filed Jan. 23, 1920. Issued Feb. 22, 1921. Term of patent, 7 years.

57,163, 57,164, 57,165. **Standard for a Lighting Fixture.** George V. Strahan, Newark, N. J., assignor to Mitchell Vance Company, Inc., New York, N. Y. Filed March 25, 1920. Issued Feb. 22, 1921. Term of patent, 7 years.

57,166, 57,167. **Wall Bracket for a Lighting Fixture.** George V. Strahan, Newark, N. J., assignor to Mitchell Vance Company, Inc., New York, N. Y. Filed March 6, 1920. Issued Feb. 22, 1921. Term of patent, 7 years.

57,168, 57,169. **Wall Bracket for a Lighting Fixture.** George V. Strahan, Newark, N. J., assignor to Mitchell Vance Company, Inc., New York, N. Y. Filed March 25, 1920. Issued Feb. 22, 1921. Term of patent, 7 years.

Mechanical Patents

1,367,562. **Electrical Attachment Plug.** Johann G. Peterson, Jersey City, N. J. Filed Nov. 23, 1917. Issued Feb. 8, 1921.

1,367,638. **Lighting Controlling Device Holder.** Arthur J. Sweet, Milwaukee, Wis. Filed Jan. 8, 1918. Issued Feb. 8, 1921.

1,368,239. **Electrical Lamp Hanger.** Nathan L. Cohn, Chicago, Ill. Filed May 6, 1919. Issued Feb. 15, 1921.

1,368,674. **Electric Lighting Unit.** Alfred A. Wohlauer, New York, N. Y. Filed July 30, 1918. Issued Feb. 15, 1921.

15,043 (Reissue). **Electrical Attachment Plug.** Johann G. Peterson, Hartford, Conn. Filed June 4, 1920. Original No. 1,279,426, dated Sept. 17, 1918, filed Nov. 23, 1917. Reissued Feb. 15, 1921.

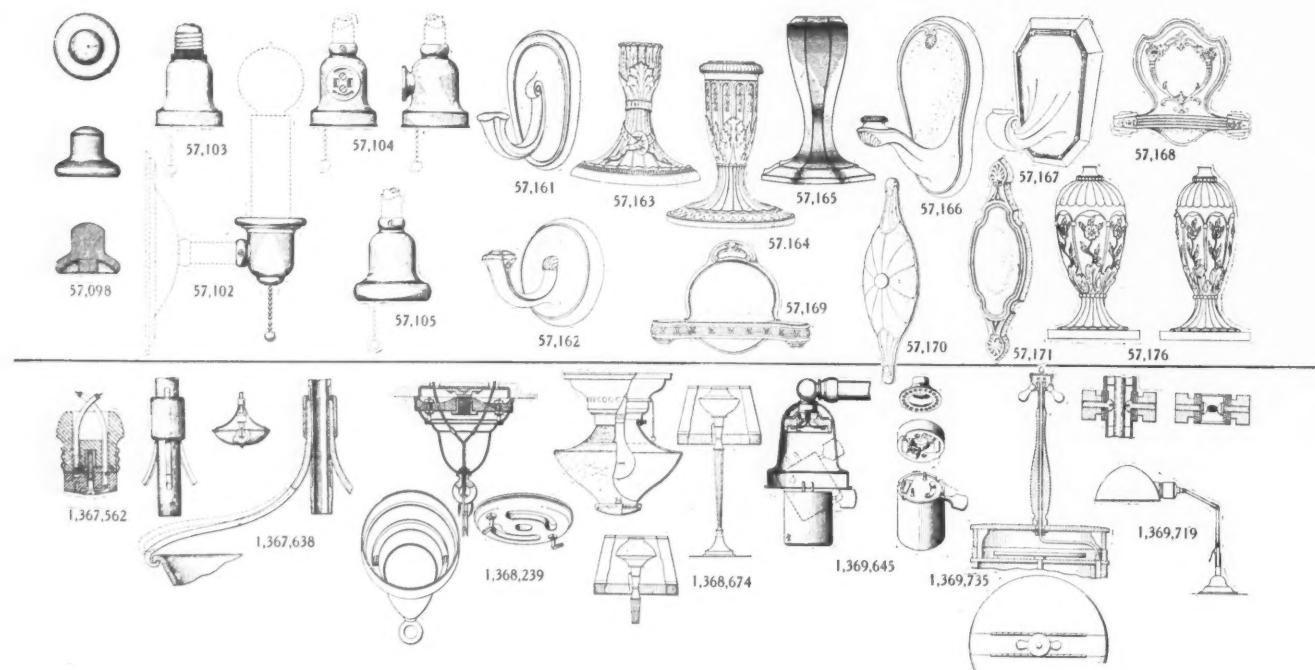
1,369,645. **Facile Assembly for Lamp Sockets.** Edgar H. Freeman, Trenton, N. J., assignor to E. H. Freeman Electric Company, Trenton, N. J. Filed Oct. 21, 1916. Issued Feb. 22, 1921.

1,369,719. **Electric Light Fixture.** Bruno B. Stenvall, Brooklyn, N. Y. Filed Nov. 7, 1919. Issued Feb. 22, 1921.

1,369,735. **Phonograph Construction and Illumination.** William H. Friedline, Meyersdale, Pa., assignor to Modernola Company, Johnstown, Pa. Filed Nov. 21, 1919. Issued Feb. 22, 1921.

57,170, 57,171. **Ceiling Plate for a Lighting Fixture.** George V. Strahan, Newark, N. J., assignor to Mitchell Vance Company, Inc., New York, N. Y. Filed Dec. 18, 1919. Issued Feb. 22, 1921. Term of patent, 7 years.

57,176. **Lamp Base.** Lester R. Wellman, Chicago, Ill., assignor to Friedly Voshardt Company, Chicago, Ill. Filed Aug. 23, 1920. Issued Feb. 22, 1921. Term of patent 7 years.



Copies of illustrations and specifications of patents may be obtained from the Commissioner of Patents, Washington, D. C., for 10 cents each.



Gossip of the Trade



Radio Convention and Exhibit at New York City

Under the auspices of the Executive Radio Council of the Second District, composed of the radio clubs of New York City and vicinity, an exhibition and convention of radio amateurs was held at the Hotel Pennsylvania, New York, March 16 to 19. Following is a list of the exhibitors who took part:

Acme Apparatus Company; Adams-Morgan Company; American Electro-Technical Appliance Company; American Radio Relay League; American Radio & Research Corporation; Burgess Battery Company; Chicago Radio Laboratories; Clapp-Eastham Company; Continental Radio & Electric Corporation; De Forest Radio Telephone & Telegraph Company; F. M. Doolittle Company; Federal Telephone & Telegraph Company; A. H. Grebe & Company; Manhattan Electrical Supply Company; W. J. Murdock Company; Pacent Electric Company; Lehigh Radio Company; Radio Corporation of America; Radio Distributing Company; Ship Owners' Radio Service, Inc.; Shotton Radio Manufacturing Company; Super Radio Laboratories; C. D. Tuska Company; United States Department of Commerce, Radio Service; United States Army, Signal Corps, Radio; United States Navy, Communication Service; Westchester Electric Appliance Company, Inc.; Westinghouse Electric & Manufacturing Company; Y. M. C. A. Radio Schools.

The convention program included a number of talks by radio experts and there was a demonstration of a wirelessly controlled car which attracted great interest from the visitors at the show. The convention committee of the Executive Radio Council for the Second District were: A. H. Heim, A. F. Clough, C. E. Pearce, J. Di Blasi, F. C. W. Thiede, J. N. Ferguson, R. H. McMann, C. G. Taber, C. J. Goette, E. W. Dannals.

The Central Telephone and Electric Company of St. Louis, Westinghouse agent-jobber for the St. Louis district, covering southern Illinois, Missouri, Arkansas, western Kentucky and western Tennessee, has moved into its new building at 2018-2022 Locust Street, St. Louis. The company is now located in a handsome four-story structure where it does an exclusive wholesale business. The first floor is given over to offices, while on the second floor a display room, 20 ft. deep, has been provided for the convenience of local dealers, for demonstrating the various household appliances and other electrical equipment distributed by the Central company in its territory.

C. B. Dibble, a Sidney Center (N. Y.) dealer in Delco Light Products, including light and power plants, water systems, motors, etc., announces the addition of a general electrical supply and appliance line to his business and invites electrical manufacturers and jobbers to send in catalogs and prices on electrical goods of all kinds.

*Glimpses of
Electrical Men at Work,
at Play, and in Convention—
as Caught by
Lens and Pencil*

Coming Conventions

NATIONAL ELECTRICAL CREDIT ASSOCIATION, Richmond, Va., May 19-20

WESTINGHOUSE AGENT-JOBBERS' ASSOCIATION, Hot Springs, Va., May 16-21

ELECTRICAL SUPPLY JOBBERS' ASSOCIATION, Hot Springs, Va., May 25-27

NATIONAL ELECTRIC LIGHT ASSOCIATION, Chicago, May 31-June 3

GENERAL ELECTRIC DISTRIBUTING JOBBERS' ASSOCIATION, Association Island, July 11-15

NATIONAL ASSOCIATION OF ELECTRICAL CONTRACTORS AND DEALERS, Buffalo, July 18-23

Frank V. Burton has resigned as sales manager of the Bryant Electric Company of Bridgeport, Conn., after nineteen years of service with that company, to take over the position of sales manager for Henry D. Sears, general sales agent for Weber wiring devices, 80 Boylston Street, Boston, Mass. Mr. Burton holds a prominent place in the wiring-device department of the electrical industry, with the various branches of which he has been connected for thirty years. At the age of seventeen, Mr. Burton left school and with his brother established an electrical contracting and supply business in Albany, N. Y., which was followed by seven years in the supply department of the Western Electric Company at New York. In 1902 Mr. Burton joined the forces of the Bryant Electric Company, being successively sales service manager for five years, Eastern sales manager for eleven years and general sales manager for the last three years. Mr. Burton's new headquarters will be in Boston, with Mr. Sears, under whose general direction he will be responsible for the sales policy pertaining to the distribution of Weber wiring devices throughout the United States.

A. D. George, contractor-dealer of Ironton, Ohio, has purchased the property at the southwest corner of Third and Chestnut Streets, just across from his present location, where a modern two-story building will be erected to house his business.

The Electric Appliance Company of Wheeling, W. Va., has been obliged to give up the store on Twelfth Street, which it has occupied for several years, on account of the sale of this building. Unable to secure other quarters, the company has transferred this Wheeling business to its Bellaire (Ohio) headquarters, located at 3107 Belmont Street.

The Northland Electric Supply Company is the new name of the business formerly conducted by the Triumph Electric Company, 211 South Third Street, Minneapolis, Minn. This change is a result of a court order due to the similarity in name to that of the Triumph Electric Company of Cincinnati, manufacturer of generators and motors. The Northland company announces that as the Triumph Electric Company it had been in operation as a distributor of electrical supplies for ten months and the volume of business for that period reached the half million mark.

The McComb Electric Company of Huntington, W. Va., is a new wholesale and retail concern, incorporated with a capital stock of \$10,000 by R. Lee McComb, Pansy K. McComb, M. S. Biddle, John E. Biscoe, and Theodore Hamlet.



This "radio-controlled" car was among the novel exhibits at the radio convention and exposition held at the Pennsylvania Hotel, New York City in March. The car was started, stopped and steered by wireless impulses from a radio set in one of the booths, and it cruised around on the exhibit-hall floor under the guidance of its unseen pilot, much to the delight of the radio "bugs" present.

W. H. McBride of the Pittsburgh Gage & Supply Company, manufacturer of Gainaday washers and ironers, has just been appointed advertising manager for that company. Mr. McBride has been associated with the advertising department for the past three years.

The Maring Wire Company of Muskegon, Mich., manufacturer of enameled and cotton-covered magnet wire, announces as its representative the Beedle Equipment Company, whose Cincinnati office is located at 1309 Union Trust Building, in charge of A. L. Beedle. The Indianapolis office at 509-510 Lemcke Building is under the management of F. T. Miles, and H. A. Strickland, 844 Book Building, Detroit, Mich., is sales representative for the State of Michigan.

The Light-A-Fixture Company is a new lighting-fixture business recently established by Maxwell Tasman and Adolph M. Levantin. The headquarters of the company are located at 1017 Flatbush Avenue, Brooklyn, N. Y.

Murvyn W. Vye and **A. J. Paine** have purchased the business of the McKenney & Waterbury Company of 181 Franklin Street, Boston, Mass., manufacturer and retailer of lighting fixtures. Mr. Vye for the past twelve years has been connected with the Wetmore-Savage Company as general manager. Mr. Paine has been associated with W. A. McKenney of the McKenney & Waterbury Company for the past sixteen years, following a previous experience of ten years in the fixture business. The McKenney & Waterbury Company has attracted wide attention by its slogan, "We Light the World." "And hereafter," says Mr. Vye, "we expect to light it better."

The Schultz Specialty Sales Company of Geneva, Ohio, has been chartered with a capital stock of \$10,000 to manufacture and sell electrical specialties and also to distribute electrical equipment. The incorporators are Don B. Schultz, James P. Carroll, R. P. Bremer, Ellen L. Burns and J. M. Modarelli.

The Myers Auto Signal Company of Toledo, Ohio, is a new concern recently incorporated to manufacture automobile signals and other kinds of electrical equipment. The company has a capital stock of \$100,000 and was organized by Herbert A. Myers, Nicholas Beer, Carle T. Bartley, A. H. Hooper and Allan A. Taylor.

I. W. Sanford, who has been engaged in the electrical business for a number of years, has opened an electrical repair shop at 244 South High Street, Columbus, Ohio, where he will specialize in the repair of appliances.

The Johnson Electric Washer Company has moved into a new factory at Fortieth and Adeline Streets, Oakland, Cal. The building, which contains 30,000 sq.ft. on the ground floor, is a steel frame structure, with brick walls, and is provided with spur track railroad connection.

The E. M. Fay Electric Company was recently incorporated with a capital stock of \$100,000 to operate a wholesale appliance business at 85 Foster Street, Worcester, Mass. "The company has been organized to specialize in domestic appliances for the reason that the men interested feel that this branch of the electrical industry has already reached the point where it can best be handled by specialists," says President E. M. Fay. Mr. Fay was connected with the Westinghouse Electric & Manufacturing Company for ten years and later was sales manager for the E. W. Ham Electric Company. W. H. Staunton, treasurer, was secretary for the Delta Electric Company for several years.



"An oyster," explained Harvey Pond, "is a fish that is built like a nut," whereupon he, being photographer of the party, snapped this marine view of the Ancient Order of Crabhunters of the Arrow Electric Company, just as they were about to push off in search of the venomous crustaceans and vicious bivalves which lurk along the Connecticut coast. The fearless crabfishermen in the picture include, of course, E. R. Grier, vice-president and manager; A. P. Deacon, Eastern sales manager; G. R. Wentworth, Syracuse sales staff; and R. L. Wildauer, Western sales manager. And by the way, the aforesaid Harvey, who used to be advertising manager of "Arrow-E," is now general sales manager, with Kent J. Owens his successor as advertising manager!

The H. C. Roberts Electric Supply Company of Syracuse, N. Y., announces the formal opening on April 1 of its new "Electrical Building" at 241-245 West Water Street, under the management of I. E. Greene. The building has been leased for five years and contains 41,000 sq.ft. of floor space. One of the novel features to be installed is a completely equipped model electrical kitchen.

The Progressive Electric & Engineering Company of Cleveland has been incorporated with a capital stock of \$100,000, to do general electrical construction and engineering work. The incorporators are H. and E. J. Flesher, M. L. Dilly, E. Hovath and H. Bolotin.

The Cook Electric Heating Company has been incorporated at Cleveland (Ohio) with a capital stock of \$50,000 to manufacture and sell electrical heating apparatus. The incorporators are F. J. Cook, Ira D. Talbott, Fred C. Horning, James G. Varley and John A. Nally.

Grandin-Dorrance-Sullivan, Inc., have opened an office as general advertising and merchandising counsellors, with temporary headquarters at 151 Fifth Avenue. The organization is headed by Frank C. Grandin, formerly advertising director Postum Cereal Company and president of the Liberty Advertising Agency; Sturges Dorrance, formerly vice-president and director of Thomas F. Logan, Inc., and advertising staff Collier's and McClure publications, and George L. Sullivan, formerly advertising director Fisk Rubber Company and supervisor of branches American Locomotive Company (Automotive Division). Roi B. Wolley, formerly director of publicity Society for Electrical Development, Inc., and sales and advertising manager Standard Electric Stove Company, is one of the associate executives of the new advertising organization.

F. C. Foster, since 1916 sales manager of the Buckeye Electric Division, National Lamp Works, Cleveland, has just assumed the position of director of sales with the Laundryette Manufacturing Company of that city, makers of the Laun-Dry-Ette.

E. H. Bay has resigned from the Chicago office of the Western Electric Company as household sales specialist and has been replaced by H. L. Patterson, who has been connected with the Hoover Suction Sweeper Company as district manager, Atlanta, Ga., for several years.

The Rochester Electric Sun Sign Company, Inc., of Rochester, N. Y., was recently incorporated with a capital stock of \$40,000. The directors of the company are J. E. Kingsley, G. A. McDonald, V. H. Clymer, W. S. Hale, Charles Fisher, B. M. Olcott and H. D. Gardner.

The Schimmel Electric Supply Company, now located at 318 Market Street, Philadelphia, has purchased the building at 526 Arch Street. It is a six-story building, 30 ft. x 200 ft., and together with the basement has a floor space of 42,000 sq.ft. After extensive alterations the building will be equipped as a modern wholesale electrical supply house.

The Dalton-Marsh Company is now the name of the business formerly conducted by the William H. Dalton Company, Salem, Mass., manufacturer of electric heating appliances and controlling devices. The new company has taken over the good will, patents, machines, etc., of the William H. Dalton Company and is located at Danvers, Mass., occupying a manufacturing space in the plant of the Consolidated Electric Lamp Company.

R. H. Butler, formerly assistant advertising manager of *Radio News* and *Science and Invention*, is now identified with the Metropolitan Advertising Company, 120 Liberty Street, New York City. "This addition to our radio department will be of particular interest to our clients in the radio field," reads the company's announcement.

Stuart Bartram is now connected with the H. W. Weeks Manufacturing Company of Hamilton, Ohio, as central representative, covering the Middle West territory. Mr. Bartram was formerly with the Hughes Electric Heating Company and later with the Edison Electrical Appliance Company, Inc.



What E. M. F. is to power transmission, R. P. M. to rotary motion and P. D. Q. to celerity, F. G. C. is to the art of picturizing ideas. To thousands familiar with his work for the New York Edison Company, "Life," etc., it will come as a pleasant surprise to learn that Mr. Cooper practices his preachments in his own "Home Electric" at Westfield, N. J., where he has one of the most completely equipped electrical domiciles in these United States.

The Johnson Electric Washer Company of Oakland, Cal., announces the opening of its new factory at Fortieth and Adeline Streets. "With more than 30,000 sq.ft. of floor space, spur tracks and room for expansion, it is hoped that the production will meet present and future demands," reads the announcement. The general office and salesroom will also be located at the factory.

The Acme Lighting Fixture Company, Inc., 132 West Fourteenth Street, New York City, has issued a revised price booklet of its catalogs Nos. 10, 12 and 14, as well as a book of fixtures for residential lighting.

C. H. Minor, general manager of the China Electric Company, one of the Western Electric's foreign subsidiaries, has been decorated by the President of the Republic of China with the Chia-ke (Excellent Crop) Decoration of the Fourth Class. The award was issued by Kuo Isu-Yun, chief of the bureau of appointments, in recognition of the assistance which the company has been able to render to the Chinese government.

The Cabell-Irby Company, Jackson, Miss., has been formed with \$100,000 capital stock, to conduct a wholesale business in electrical supplies in Mississippi and the northern part of Louisiana. The promoters of this enterprise are Stuart C. Irby and T. C. Cabell, who, under the firm name of Stuart C. Irby & Company, have successfully conducted a retail and construction business for two years. Previously Mr. Irby was for twelve years connected with Henry L. Doherty & Company of New York, and resigned as business manager of one of the Doherty properties to go into business with Mr. Cabell. Mr. Cabell is a graduate of the Massachusetts Institute of Technology and has had fifteen years' experience in electrical engineering, construction and sales. Mr. Cabell is president, Mr. Irby is vice-president, and R. O. Jones, Jr., is secretary and treasurer of the new company.

The National X-Ray Reflector Company, Chicago, has sold an installation of X-ray indirect lighting for the Field Museum of Natural History. This building is a gift to the city of Chicago by the Field Estate and takes the place of the 1893 World's Fair building in Jackson Park, which formerly housed the enormous art collection. The lighting installation comprises 396 indirect fixtures. The low wattage of sevenths watt per square foot provides excellent illumination, as the walls and ceilings are white and carry little decoration.

The Holt Farm Light Company has been incorporated in the state of Ohio for \$1,000,000 and will locate its factory at Toledo. It takes over the Automatic Light Company at Ludington, Mich., manufacturers of the Holt 110-volt direct-current (without storage battery) farm-lighting plant. The company has elected the following officers: L. W. Holt of the Automatic Light Company, president; S. H. Humphries of Detroit, vice-president, and H. K. Greenman of the Automatic Light Company, secretary and treasurer. In addition to these officers the directors are prominent Ohio men, as follows: A. E. Kowalk of Kowalk, Smith, Cuthbertson Company, Canton, Youngstown and Mansfield; John E. O. Feller, senior member of the firm of Feller & Spilker, Canton and Cleveland; W. W. Headings, late president of the Bellevue Carbon Company, Bellevue, and George H. Moore, Jr., senior member of the firm of the Moore & Pero Electric Company, Fremont. The history of the unit is interesting. Scott J. Matthews built high-priced boats for millionaires. They wanted electric lights on the boats. Mr. Matthews developed a plant to produce 110-volt direct current, without storage batteries. He decided to market the unit; the price was high, but he reduced it. His manufacturing was carried on at Ludington, Mich. Both Mr. Holt and Mr. Greenman saw the opportunities and purchased it from Mr. Matthews. The company has many agencies both here and abroad.

The Bryant Electric Company announces the appointment of Robert M. Eames as general sales manager to fill the vacancy caused by the resignation of Frank V. Burton. Mr. Eames has been active in the sales organization of the Bryant Electric Company for fifteen years and for the last few years has been its export manager. He is thoroughly familiar with the sales policy, the complete line, and its rapid development.

The Carter Electric Company, Atlanta, Ga., has taken up new quarters in its just-completed warehouse on Mangham Street. The new building provides the company with nearly 60,000 sq.ft. of floor space.



H. R. King, who recently resigned his position of power and light sales manager with the Western Electric Company to accept the appointment of sales manager with the M. S. Wright Company, Worcester, Mass., is wont to look upon county fairs as his annual amusement. The snapshot shows him enjoying the sights and his Jimmiepipe at the Somerset Hills Fair, Far Hills, N. J.

E. L. Bradbury, assistant sales manager of the Holophane Company, has just returned from an extensive trip in the Southwest, where he has been stimulating interest in better illumination. Mr. Bradbury reports that a prosperous 1921 is expected in the States of Oklahoma and Texas and he finds that the electrical trade in that section is awake to the fact that there are enormous dormant sales possibilities for the man who will push good illumination. "Selling will sell," declares Mr. Bradbury.

The Ward Electrical Company, manufacturers and exporters of electric specialties and supplies, Philadelphia Stock Exchange Building, Philadelphia, Pa., announces that recent reports are in error in stating that any part of the Ward Electric Company has been sold to any other company. The Ward Electric Company markets high-grade push-button switches, New Code and plug fuses, entrance switches and cut-outs, knife switches, ground clamps, automobiles fuses, export electrical specialties, etc.

(Continued on page 220.)



New Merchandise to Sell and Where to Buy It

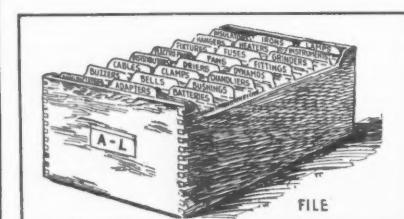
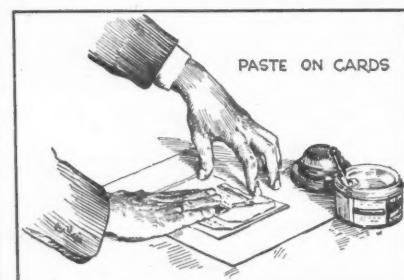
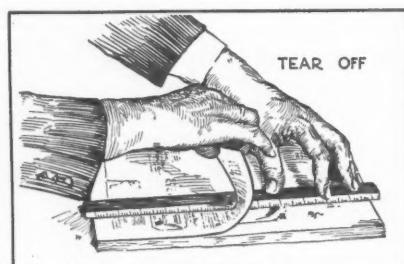
Appliances, Socket Devices and Wiring Supplies Which Manufacturers and Jobbers Are Putting on the Market

Including Many New Appliances for the "Home Electric"

How to Use These Pages to Make Your Own Buying Index

Beginning with the September, 1917, number *ELECTRICAL MERCHANDISING* has been furnishing its readers with the selective new-merchandise catalog service continued on these pages. By tearing out those items which affect your business and pasting them on filing cards, you can make a buying index that will put information on *what is made and who makes it* right at your finger's end.

Every item, with its illustration, will fit a standard 3-in. by 5-in. filing card. Or, if preferred, these items can be pasted on sheets of paper for binding in a loose-leaf catalog or folder.



This section "New Merchandise to Sell" is an editorial text section prepared by the editors solely in the interests of readers of *ELECTRICAL MERCHANDISING*. As its title explains, its purpose is to put before our readers information concerning the new merchandise and latest inventions on the market.

To be described here, articles or devices must be new and of general interest to our readers. These descriptions are solicited from all manufacturers, and the items are published free of all cost to the maker of the device, and without respect to advertising or any other consideration, except their interest to the reader. The editors are the sole judges of what shall appear in this section, and readers may depend upon the independent character of this service.



Farm Electric Plant Driven by the Wind

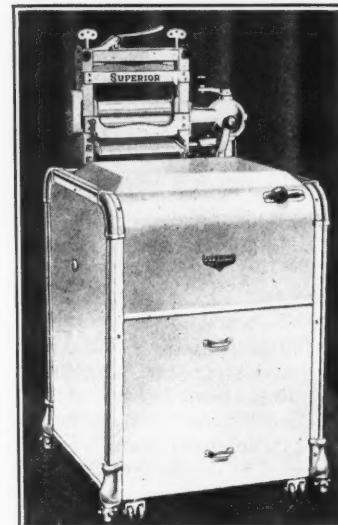
From *Electrical Merchandising*, April, 1921

A windmill outfit that generates electricity daily to an average of about 2,000 watt-hours a day and stores it in batteries for use in supplying light and power is a new product, the "Aeroelectric," recently perfected by the Perkins Corpora-

tion, Mishawaka, Ind. The windmill is designed to take care of the wind at its low and high speed, and to automatically cut in and out, conserving the use of the storage battery and the energy accumulated.

A 1-kw. Westinghouse generator, 32-volt type, is directly connected to a 14-foot steel wind wheel, the wheel being left in the wind at all times. The generator is mounted at the top of the tower, completely inclosed from the elements. The storage battery has a capacity of 280 amp-hours and will store enough electricity to operate the lights on an average farm for eleven successive days of no wind—a condition of weather seldom found. An automatic relay enables the mill to charge on sixteen volts in light winds and to automatically change over to 32 volts when the wind increases to sufficient velocity.

Its operation is practically identical with that of the gasoline-driven farm-light plant, says the maker, the only difference being that no fuel-burning type of engine is required.



Cabinet-Type Oscillating Clothes Washer

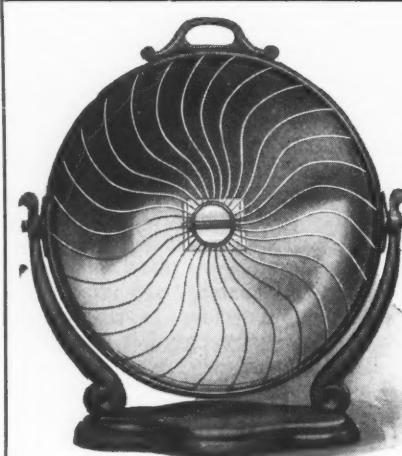
From *Electrical Merchandising*, April, 1921

The new "Superior" electric clothes washer made by the Superior Machine Company, formerly of Sterling, Ill., now of DeKalb, Ill., is of the cabinet type, and is an oscillating washer. Its capacity is eight sheets.

The copper tub is made by special machinery, none of the double seaming being done by hand with wooden mallet. A 1/2-hp. motor is used, belt driven. All gears in the driving mechanism are cut and inclosed. The wringer is an all position swinging wringer and reversible.

A feature of the washer is a device designed to permit the tub to start without any jerk. This is a friction clutch in the mechanism of the machine, and no matter how suddenly the starting lever is pushed to start the washing, the tub will start rocking very slowly, after two or three oscillations gaining the desired speed.

The washer is painted a light gray.



"Librarian's" Radiant Heater

From *Electrical Merchandising*, April, 1921

A step toward adding the "style" touch to the radiant heater has been made by the Majestic Electric Development Company, 656 Howard Street, San Francisco, in its new model of radiant heater, which it calls the "Librarian's" heater. Instead of being perched upon a peak-shaped base, the reflector is suspended between two curved arms supported on a small flat base, making the heater more suitable for resting on the library table or work table.

The heater measures 20 1/2 in. high, 20 in. wide and 10 in. deep and weighs 9 lb. Its standard finish is statuary bronze; special finish, light buff. It may be had with one, two or three heating elements in the copper reflector, making the wattage consumption 615, 960 or 1,440.



Electric Farm Signal

From *Electrical Merchandising*, April, 1921

To take the place of the old dinner bell or horn on the farm and to call men to the house from the farm buildings or nearby acres, an electric farm signal is offered by the Benjamin Electric Manufacturing Company of Chicago and New York. Installed on the house, this device can be used for calling for dinner or to the telephone. In fact, a system of signals can be arranged by a number of blasts so that those out away from the house will know just what is wanted.

The signal is for use with 32 or 110 volts direct current only. It has a cast back cover with lugs for mounting screws and a one piece drawn brass projector. One model is weatherproof, and the other is the same but has an insulating bushing with wire opening for use with open wiring.

Rheostat for Charging Batteries from 32-Volt Farm Electric Plants

From *Electrical Merchandising*, April, 1921

A 6-inch rheostat for charging small batteries on gasoline cars from 32-volt farm-lighting plants has just been developed by the Cutler-Hammer Manufacturing Company, Milwaukee, Wis.

For charging, the rheostat is connected in one of the lines from the 32-volt generating set and in series with the battery to be charged. A dial plate under the operating handle is marked to indicate the settings for charging certain numbers of cells. The indicating points are for three, six, nine and twelve cells. The handle is moved until the arrow is at the proper point on the dial plate, after which the battery circuit is closed and the charge begins. No ammeter is required to measure the charging current.

The device is small and compact and readily mounted on any flat surface, such as a switchboard or wall.



Portable Power Plant

From *Electrical Merchandising*, April, 1921

A home electric power plant, designed to be readily set up anywhere and carried from place to place as individual needs require, is a new product of the Home Electric Lighting Company, East Orange, N. J. The entire plant weighs 100 lb. and takes up only a few cubic feet of space, being 18½ in. high, 20 in. long and 13 in. wide.

The engine is single-cylinder, two-cycle and air-cooled, and develops about 1½ hp. Ignition is obtained by a Simms high-tension magneto, driven by the rotating disk valve. The generator is a six-pole shunt-wound machine, 12-16 volts. Under normal conditions, it will furnish current to light thirty 21-candle power lamps. The generator is mounted on the front end of the frame of the plant and the armature is connected directly to the crankshaft of the engine. A hollow cylindrical fuel tank is mounted around the generator, giving the plant a neat, compact appearance.



Dining Room Lighting Fixture

From *Electrical Merchandising*, April, 1921

The "Tabellier," the dining room lighting fixture recently brought out by the Moreau Company, 1303 Oregon Avenue, Cleveland, Ohio, combines a central light of inverted dome effect surrounded by four candle lights. The design is to give direct light on the dining table, supplemented by additional light from the candlesticks. A feature of the fixture is that the bottom with the glass dish is hinged. This dish can also be had in color glass as well as the globe on top of the dish.

Repulsion-Induction Motors

From *Electrical Merchandising*, April, 1921

Simplicity of construction and small number of parts are features of the "Duro" repulsion-induction motors put out by the Burnett-Larsh Manufacturing Company, Dayton, Ohio. They are made in three sizes, ½ hp., 1725 r.p.m.; ½ hp., 1725 r.p.m.; and a special washing machine motor. The voltage is 110 and 220.

The motor is especially designed to carry heavy duty work under low voltage conditions, without stalling or burn-outs.

Electric Signal Device for Hen Nests

From *Electrical Merchandising*, April, 1921

An electric signaling device which will indicate at the house or office of the owner of a poultry plant whether any particular nest is occupied by a hen, and when a hen enters or leaves a nest, is being placed on the market by Charles W. Chmelnik, 67 Grenelle Avenue, Garfield, N. J. In the case of a nest containing eggs for hatching, should the hen be absent from the nest too long, it will be known to the owner and an investigation can be made to prevent damage to the eggs. The device is also useful in the case of trap nests, employed for keeping a record of laying hens.

The operation of the device depends on a vertically moving cross bar extending across the open end of the nest, which the hen must push up when entering the nest, and which communicates with a terminal box and by its action closes or opens an electric circuit. The device has means for adjusting the bar to different heights, for large or small hens, and means for adjusting the contact terminals accordingly.

Egg Tester

From *Electrical Merchandising*, April, 1921

To test eggs by placing them over an electric lamp Frank W. Gaylor of 30 Barclay Street, New York City, has placed on the market the small "Firefly" egg tester. It consists simply of a box base containing a tungsten battery, and a hood enclosing the lamp, the hood having an opening at the top in which the egg is placed.

The hood is so hinged to the box that by giving it a slight pressure downward it is brought in contact with the screw-head in the top of the box, causing the lamp to flash. In this way there is no continuous light, but the lamp flashes only as each egg is placed for testing, and the maker estimates that from fifteen to twenty thousand eggs may be tested without renewal of battery.

The device is primarily intended for poultry raisers, but its field may equally well include the home kitchen, restaurant, hospital, etc.



Continued on third and fourth pages following, for your convenience in clipping and filing. Each item will fit a 3 x 5 in. standard filing card

H. M. Gansman, formerly manager of the supply division, Philadelphia district office of the Westinghouse Electric & Manufacturing Company, has resigned to become general manager of the H. C. Roberts Electrical Supply Company, Philadelphia, Pa. H. F. Brinckerhoff, who has been in charge of the Bluefield and Charleston offices of the Westinghouse company, has been appointed manager of the supply division of the Philadelphia district office, succeeding Mr. Gansman.

The W. D. Kendall Company of Worcester, Mass., is planning to move back to its old headquarters in the Day Building on Main Street, which the company was forced to vacate last December when the building was destroyed by fire.

The L. & B. Electric Company of Rensselaer, Ind., is now under the sole management of H. A. Lee, who announces that he is specializing in household appliance sales, as well as carrying on the contracting end of the business.

The Fortified Company, a Kansas City concern manufacturing electrical heating devices, is erecting a new factory at the southeast corner of Fourth Street and Agnes Avenue. The company is at present located in the Gumble Building.

The Cutler-Hammer Company of Milwaukee, Wis., announces that the company's Chicago office has been removed from the Peoples Gas Building to the company's own building at 323 North Michigan Avenue, on the new Michigan Boulevard link. H. L. Dawson is manager of the Chicago office.

The Klaus Radio Company, manufacturer and distributor of wireless apparatus, has established a branch office in Peoria, Ill., with N. O. Garver, a former United States Navy radio instructor, in charge.

The George F. Grant Company, Inc., formerly of Binghamton, N. Y., is now located at 105 Hudson Street, New York City.

L. E. Trotter, assistant sales manager of the Post-Glover Company, Cincinnati, Ohio, was elected a director of that company at a recent stockholders' meeting. Mr. Trotter is well known in Cleveland and in Denver, where he formerly represented the Crocker-Wheeler Company.

The Oriole Electric Manufacturing Company, Norwalk, Conn., has been incorporated with a capital stock of \$50,000. The organizers of the company, which will deal in and manufacture electrical supplies, are R. C. Craymer of West New York, N. J., and W. E. Tammany of South Norwalk, Conn.

The Eastern Electric Manufacturing Company is the name of a new concern manufacturing electrical machinery, accessories and devices. The company's capitalization is \$100,000 and the incorporators are E. A. Harry, Milford, Conn.; R. M. Gambino and Frank L. Flaminia of Bridgeport, Conn.

Abraham Katz, electrical contractor, formerly of Colchester, Conn., announces that his new business address is 70 Franklin Avenue, Chelsea, Mass.

The Wolf Electric Company, owing to the big growth in its business and the necessity for expansion, has leased an entire building at 443 South High Street, Columbus, Ohio. The company does a general electrical business and distributes farm-lighting plants. Fred G. Wolf, formerly of the Ohio Electric Company of Canton, Ohio, and the Champion Engineering Company of Kenyon, Ohio, is president of the company.



No, sir! This is not a cartoon of Burleson untangling the wire situation. Not at all. The August figure shown is that of Senator Farrenkopf—State Senator August Farrenkopf of New York, who is also famous as the Farrenkopf of Stanley & Patterson, New York. The Senator (who between sessions of the Albany solons functions also as a jobber's salesman), is apparently about to cast lots to decide whether he will have fresh fish or canned corned beef for lunch.

J. A. Onderkirk & Company, 12 North Fifth Street, Philadelphia, have discontinued their electrical contracting business to enter the wholesale field.

The Herman Andrae Electrical Company of Milwaukee, Wis., has moved to 140 Second Street, where it will occupy the entire building. The new shop is in charge of W. J. Bennett.

The Electric League of Canton (Ohio) is a newly formed organization of wholesalers and retail electrical dealers. G. E. Nash has been elected president and the directors are A. A. Grogan, R. G. Vincent, F. A. Moegling, V. P. Meese, W. E. Preston, W. E. Selby, W. F. Braucher and F. A. Groshmeyer. The object of the organization is first to develop the men now in business, making it possible for them to be of greater service to the public and secondly to enlighten the public on the subject of electricity, its uses and advantages.

The Buckeye Power Company of East Liverpool, Ohio, held a three-day exhibit in which the latest developments in electric lighting in relation to domestic, industrial and commercial use were displayed. F. Haus, assistant chief engineer of the National Lamp Company of Cleveland, Ohio, delivered lectures on the practical use of electricity for lighting purposes. The object of the exhibit was to explain the proper use of electric light and electrical appliances.

The R. W. Lillie Corporation has been appointed Eastern representative of the Maring Wire Company, Muskegon, Mich., manufacturers of enameled and cotton-covered magnet wire. The New York office at 30 Church Street is in charge of R. W. Lillie and includes in its personnel: Lee Skipwith, R. S. Edwards, E. M. Smith, and W. F. Collins. The Boston office at 176 Federal Street is in charge of H. D. Steele, assisted by R. M. Simpson.

S. N. Clarkson, who for the past two years has been a member of the editorial staffs of *ELECTRICAL MERCHANDISING* and *Electrical World* at Chicago, has resigned to enter business for himself in the engineering and specialty sales fields, with offices in the Star Building, St. Louis, Mo. Mr. Clarkson was formerly sales engineer and assistant sales manager of the Union Electric Light & Power Company, St. Louis, and was later in charge of power sales at Milwaukee. He is a past-chairman of the St. Louis Section, American Institute of Electrical Engineers.

The F. A. Clarke Company and its sales force and branch managers of Los Angeles, Long Beach, Riverside, San Bernardino and Santa Ana held a company banquet in January, at which addresses were made by F. A. Clarke and the managers of the branches. Those present were F. A. Clarke, L. R. Cahan, S. S. Cowan, Garnett Duncan, F. O. Jennings, John Hay, Leland Benson of San Bernardino, J. A. Setchell of Long Beach, L. R. Frazee of Santa Ana, Morris Gordon, J. K. McCarthy, C. S. Stocker, B. W. Broderson, N. I. Field, C. M. L. Nelson, C. N. Deming, Homer E. Mills, George H. Wilson and J. A. Crellin.

The E. M. Fay Electric Company, 85 Foster Street, Worcester, Mass., has been recently incorporated with an authorized capital of \$100,000, for the purpose of selling domestic appliances at wholesale exclusively. E. Miller Fay was elected president and treasurer and W. H. Stanton was elected secretary. The company has been organized to specialize on domestic appliances. The men interested feel that this branch of the electrical industry has reached the point where dealers will be best served by an organization of specialists. At this time the Fay company is devoting a large part of its efforts to the distribution of the "America" cleaner, the "American Beauty" heating device and the entire "Getz" line of washing machines, for which it is the authorized distributor in New England.

New Retail Electrical Stores

The East Bay Electric Company is a new California concern, located in the Keser Building at Richmond.

The Egyptian Electric Company is a new retail business of Marion, Ill., owned and conducted by Roy Reed and S. S. Starrick.

N. Wise and B. O. Skelton have opened a new shop at 310 South Spring Street, Los Angeles, Cal.

F. and C. Roberts have joined the ranks of the Michigan dealers. Their shop is located at Deerfield.

M. F. Greene has gone into the retail end of the industry at Ferndale, Wash.

Michael Lukac, electrical dealer of Freeland, Pa., has opened a new shop on North Wyoming Street, Hazleton, Pa.

Messrs. Brown and Banzhof are the proprietors of a new retail business on State Street, Westport, Conn.

Jack Cavender is now engaged in a retail electrical business at Del Roy, Cal.

The C. A. Smith Electric Company is a new retail concern organized by C. A. Smith and others at Wellsville, Kan. The new company has a capitalization of \$100,000.

The Skillman Electric Company is a new retail business located at 5 West Market Street, Indianapolis, Ind.

The Chadakoin Electric Company, Inc., formerly in business on Williard Street, has opened a new shop at 629 East Second Street, Jamestown, N. Y. A. J. Lawson, C. H. Johnson and E. L. Hurley are the proprietors.

B. L. Thompson of Woodbine, Kan., dealer in hardware and implements, has added a line of electrical appliances.

Messrs. Rollins and McGrath, who operate a plumbing business in Clayton, Mo., have just added a line of electric washers.

H. B. Nash & Company have added a line of fixtures and lamps to their hardware business, located at Bowen, Ill.

The A. C. Day Electric Company has opened another store in Cleveland, at 6500 Euclid Avenue. This is the second business operated by the company, the original store being located at 13943 Euclid Avenue. The new store has a floor space of 3,000 sq.ft. Mr. Day, secretary and treasurer of the company, is also president of the local Electrical Dealers' Association.

John T. Rose, a Union (S. C.) dealer, has purchased the Bohnert Block, at 145 Washington Avenue, Endicott, N. Y., where he will open a retail shop.

E. W. Pantz, who is engaged in the hardware business at Reedsville, Wis., is also selling electrical appliances.

H. Paull and G. Slavich have opened a retail electric shop at King City, Cal.

The Howard-Sims Electric Shop is a new West Virginia retail business recently opened at 457 Twelfth Street, Huntington.

Charles Madison is a new contractor-dealer whose shop is located on Bank Street, Ansonia, Conn.

The Sanitary Plumbing & Electric Company is a new retail concern of Chipley, Fla.

Messrs. Starkey and Struble, formerly in the plumbing business at Forest Lake, Minn., have just opened a retail electrical shop in the same town.



"Banditti" is what some tactless folk call them, but P. R. Conley—the one with the second lieutenant's mustache—declares they are "Royalists." From left to right (if indeed they are ever right!) they are J. C. Creighton of the Creighton-Morris Company, Oakland, Cal.; P. R. Conley, Pacific Coast sales manager of the P. A. Geier Company, and P. G. Gough of Listenwalters & Gough, Inc., Los Angeles, who are making more or less dust fly as they sell electric cleaners on the coast.

R. M. Wilder has opened a new shop dealing in electrical appliances and supplies at Altamont, Mo.

The Ceramic Electric Company has been incorporated at Wellsville, Ohio, with a capital stock of \$25,000 to deal in electrical goods. The organizer of the company is P. W. Emge.

The Crystal Electric Sales Company of Mansfield, Ohio, is a new retail business organized by W. Spitzer. The new company has a capitalization of \$25,000.

John Quick has established himself in the retail electrical business at Manistique, Mich.

Lucien Groat is a new electrical retailer of Lewiston, Ill.

Ralph Eatough has been reported as the proprietor of a new auto electric shop at Central City, Neb.

W. W. Maertz, hardware dealer of Reedsville, Wis., has installed a line of electrical appliances.

Edward J. Shimon has added a line of electrical appliances to his furniture and jewelry business, located at Reedsville, Wis.

I. C. Bruss is a Reedsville, Wis., druggist who has added to his business a line of electrical appliances.

The Scrimgeour Electric Company of Worcester, Mass., has recently been incorporated to engage in the wholesale and retail electrical business. J. K. Scrimgeour, formerly with the C. C. Coghlun Electric Company, Worcester, is president and treasurer.

The Ace Electrical Company is a New York City retail business recently opened at 209 West Thirty-fourth Street.

The Sutton-Newborn Electric Company is a new \$25,000 retail concern established at Kinston, N. C., by James Sutton and C. L. Newborn.

Corrine Bros. have opened a new retail electrical and auto business at Allentown, N. J.

W. E. Moorefield is a new Beckley (W. Va.) dealer who has recently opened a shop carrying a \$10,000 stock of electrical appliances and supplies.

The Cleveland Washing Machine Company is a new business dealing in electrical appliances at Euclid Avenue and East Sixth Street, Cleveland.

Calkins Brothers have opened a shop at Massie Mills, Va., to deal in electrical fixtures and supplies.

The Slicer & Keller Electric Supply Company has opened a \$10,000 retail electrical business at Meyersdale, Pa.

Patterson & Patterson are newcomers to the Florida retail industry. Their new business is located at New Smyrna.

The Fisher Electric Company, a retail concern of Randolph, N. Y., has just been established by A. A. Bragg, H. W. Fisher and Paul Deuell.

Messrs. Hatch and Craig are newcomers in the retail electrical industry. They have established a shop and battery supply business at Gloversville, N. Y.

W. M. Robinson, who conducts a general store at Carrabelle, Fla., has added a line of electrical goods.

The Pennsylvania Power & Light Company, whose headquarters are located at Allentown, Pa., has opened a retail branch store on North Tamaqua Street, McAdoo, Pa.

H. M. Gilbert has engaged in the retail electrical business in New York City. His shop is located at 73 West Forty-fourth Street.

M. R. Hill, who conducts a general store carrying a line of electrical appliances at Warfordsburg, Pa., has opened a similar business at Hancock, Md.

The Burlington Electric Company on West Davis Street is a new addition to the industry at Burlington, N. C. J. A. McGilvary is president of the new company.

(Continued on page 224)

Motor-Operated Dishwashing Machine

From *Electrical Merchandising*, April, 1921

The Insinger Company, 4651 Stanton Avenue, Philadelphia, Pa., has recently placed on the market an electric dishwashing machine which has a capacity of 6,000 dishes an hour. The machine is adapted for use in hotels or restaurants. The dishes are placed in a rack, and are then slid into the machine and onto an automatic lift apparatus. The rack is lowered into water in the bottom of the washer. A propeller agitates the water in which the dishes are immersed. The rack is then raised by the automatic lift and held stationary while the dishes are rinsed clean by four overhead sprays of water. A $\frac{3}{4}$ -hp. motor is used to agitate the wash water and operate the lift. The entire machine occupies a floor space of $7\frac{1}{2}$ ft. by 3 ft. Piping connects the hot water supply to the machine and a drain is used to empty the wash water from the tank.



Dining Room Light

From *Electrical Merchandising*, April, 1921

A new adaptation of the "T.R.B." lighting unit has recently been perfected by the Mitchell Vance Co., Inc., 503-511 West Twenty-fourth Street, New York City, as shown in the accompanying illustration. The maximum amount of light which is diffused directly on the table is such as to produce an even radiance. The ceiling softly illuminated without the presence of shadows or light rings helps to create a general illumination throughout the room, while the walls receive a glow of light of lesser intensity with the added charm of color transmitted by the silk shades, the result being a room of dignity, beauty and repose.

This design is sold under the number M.V. 798 and is adapted for use with 100 or 150 watt Type C Mazda lamps.



Soldering and Repair Kit

From *Electrical Merchandising*, April, 1921

A small compact soldering kit for automobile mechanics, electricians and mechanics, to be carried in the tool box, is a new product of the Federal Manufacturing Company, Boston, Mass. The kit contains an alcohol blow-torch, one bar of "Supreme" brand aluminum solder, making possible repairs on aluminum; and one coil of acid-core wire solder. The kit is designed especially for emergency repairing of broken wiring connections; for repairing leaks in radiators; and in general for repairs on all metals, including aluminum.

Motor-Driven Vertical Boring Machine

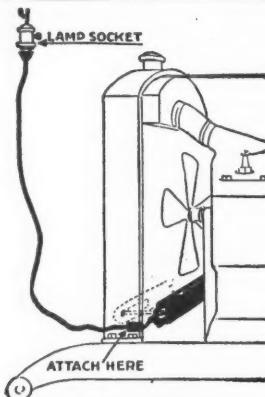
From *Electrical Merchandising*, April, 1921

An application of direct motor drive in a wood working machine is made in the construction of a single spindle boring machine placed on the market by Baxter D. Whitney & Son, Inc., Winchendon, Mass.

Meter-Reading Device

From *Electrical Merchandising*, April, 1921

For use on watt-hour and polyphase meters the Economy Appliance Company, Waterloo, Iowa, is manufacturing a meter reading and recording device. A clock is provided for operating the device at any specified time for recording the meter reading on a card especially made for that purpose.



Automobile Radiator Heater

From *Electrical Merchandising*, April, 1921

The "Sharpe" electric radiator heater, designed to keep the water and oil in the automobile warm in freezing weather, and manufactured by the Sharpe Electric Appliance Company, Detroit, Mich., attaches permanently to the base of the radiator of the car, on the inside, just above the sediment tank. It is connected by a heavy duplex cord to a standard attachment plug, which is rigidly clamped to the outside of the radiator shell. It is not necessary to raise the hood. Current is furnished from any ordinary lamp socket on direct or alternating circuits.

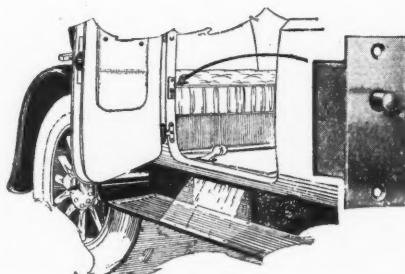
The heater is designed to fit all passenger cars and trucks and is easily attached without special tools.

Automobile Door Switch

From *Electrical Merchandising*, April, 1921

For automatically illuminating the running board or step and the entrance to closed automobiles, the Bryant Electric Company, Bridgeport, Conn., has developed a single push button switch which automatically closes the circuit and lights the inside lights when the car door is opened. The shell within which is fastened to the switch mechanism is of sheet brass with heavy fiber back to form the insulated base for mechanism and screw terminals. This shell is of the smallest practical dimensions, $1\frac{1}{2} \times \frac{3}{8}$ in., to minimize the size of recess hole necessary to be cut into the door frame.

The switch proper is of the standard knife blade contact type as used in Bryant switches for 110-volt house service. A round polished plate is furnished for fastening to the inner surface of the door to serve as strike plate for the button. This is to prevent the marring of the finish on the door.



What's new on the market? These pages will tell you. 

Shallow-Water Supply System

From *Electrical Merchandising*, April, 1921
 The Monarch Engineering Company, Dayton, Ohio, has placed on the market an automatic electric water supply system designed especially for small homes and cottages in localities where no water supply is available. The system is designed to deliver water under pressure automatically from a cistern, lake or well. The apparatus consists of a double-acting shallow-well pump with a capacity of 100 gal. per hour. A $\frac{1}{2}$ -hp., 110-volt, direct-current or a 110-220-volt, 60-cycle, single-phase, alternating-current motor of the repulsion-induction type drives the pump. The upright tank of 35-gal. capacity is equipped with pressure and water gages and an automatic control switch regulates the pressure between limits of 20 and 40 lb. The system is connected by piping to the source of supply and the water is pumped into the supply main of the house.

**Battery Tester**

From *Electrical Merchandising*, April, 1921

For tests on batteries for farm electric equipment, automobiles, etc., the Westinghouse Electric & Manufacturing Company has recently placed on the market its Type PI portable instruments. There are no springs or moving coils in these instruments. Dead-beat indications are assured because of an efficient damper. A moving soft iron vane polarized by a stationary permanent magnet and deflected over its scale by the action of a stationary current coil furnishes the moving element. The instrument is assembled in a molded composition case, $2\frac{1}{4}$ in. over all, and weighs 6 ounces.

Other uses for it are for tests on electrical toys, radio apparatus and amateur experimenting.

Rope-Operated Hoist Controller

From *Electrical Merchandising*, April, 1921

For monorail trolleys and small hoists the Allen-Bradley Company, Milwaukee, Wis., has placed on the market controllers designated as F-2201, F-2202 and F-2204, for direct-current use and for use with squirrel-cage and slip-ring motors respectively. The controller can be operated from the floor by ropes or chains which actuate a rope-wheel or sheave, which has a spring return. If the ropes are released the wheel returns the controllers to the "off" position automatically. In these controllers all switching and contact-making is done with a clapper-type contactor of the copper-to-copper, rolling type. A graphic compression resistor is mounted within the controller, and speed control is obtained by pressure variation upon the resistor column as applied by the rope control. The controller is enclosed in a pressed steel housing with a hinged cover to permit inspection.

Direct-Connected Clothes Washer

From *Electrical Merchandising*, April, 1921

The Central Manufacturing Company, 2525 Montgomery Street, St. Louis, Mo., has placed on the market an electric washing machine the motor of which is direct-connected, no belt, chain or spring drive being necessary. The moving parts are all inclosed and the machine is made entirely of metal. A perforated cylinder containing the clothes turns through a complete revolution and then reverses, periodically carrying the clothes to the top and then dropping them through the hot suds. The perforations of the cylinder are cupped, thus making a smooth surface on the inside.

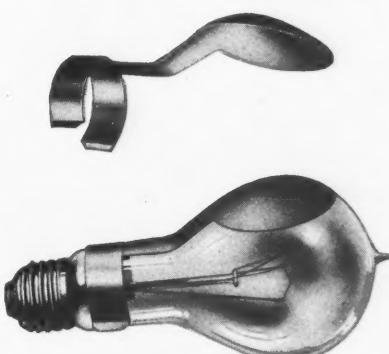
The construction of the cylinder is such that the parts can be unlocked and taken out. The wringer swings and locks in four different positions. The washer is made in two sizes, one with a twelve-sheet capacity, the other nine sheets.

**Protection Caps for Gas-Filled Lamps in Electric Signs**

From *Electrical Merchandising*, April, 1921

With sign designers in increasing numbers employing gas-filled lamps in exposed signs the problem of protecting the bulbs from cracking due to sudden chilling from rain or melted ice or snow becomes a serious one. Experience has shown, however, that it is chiefly a small, hot area of the bulb directly above the filament that requires protection. A small metal cap manufactured by Riegelman & Forsthe, 14401 Potomac Avenue, East Cleveland, Ohio, is designed to protect this hot spot. It is the heat storage capacity of the cup-shaped disc that prevents too sudden a chilling of the bulb.

Caps are made in three types to fit all sizes of gas-filled Mazda lamps up to and including the 100-watt lamps.

**"Hang-Straight" Fixture Stem**

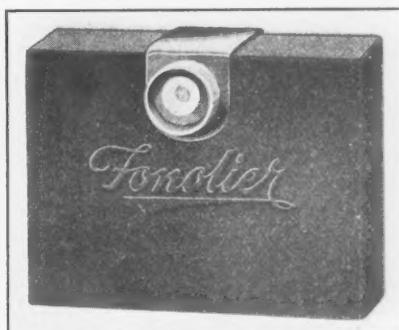
From *Electrical Merchandising*, April, 1921

A new fixture stem has been added to the E-Z wiring devices of the Peerless Light Company, 663 West Washington Boulevard, Chicago, so designed that the fixture will adjust itself and hang straight under all conditions, whether the ceiling is absolutely straight or not. The device eliminates the use of the ordinary insulating joint.

Phonograph Record Flashlight

From *Electrical Merchandising*, April, 1921

Placed up against the side of the phonograph, on the inside, the record flashlight put out by the Stuart Products Corporation, 663 West Washington Boulevard, Chicago, throws just enough light on the record to guide one in placing the needle, when the room is dark. It is not attached to the phonograph in any way. The small bulb and reflector are screwed on one side of the battery, and a screw on the other side is the switch. By turning this screw to the right the "Phonolite" is lighted; to the left it is turned off.

**Pressure-Operated Switch for Motor-Driven Pumps**

From *Electrical Merchandising*, April, 1921

A compact pressure regulator of the diaphragm type, for use with motor-driven pumps and compressors operating on closed pressure systems, has recently been developed by the Cutler-Hammer Manufacturing Company, Milwaukee, Wis. The switch automatically starts and stops the pump or compressor at such times as the pressure falls or rises to a predetermined minimum or maximum pressure, thus maintaining the pressure between two fixed limits.

It is arranged for easy mounting, and its three overall dimensions are $6, 6\frac{1}{2}$ and 8 in. It has two poles, thus enabling it to be used also for connecting small alternating-current and direct-current motors directly to the line. The entire mechanism of the regulator is enclosed in a cast iron case arranged for the entrance of conduit. Terminals and fingers are exposed by taking off the cover of the case, which necessitates only the removal of three screws.

File these items on 3 x 5 in. cards every month, to keep your stock index up to date.

New Retail Electrical Stores (Continued)

Messrs. Duncan and Vough have opened a new contractor-dealer business at 738 Ann Street, Stroudsburg, Pa.

The Fals Electric Company of Cleveland has been incorporated with a capital stock of \$10,000 to operate a retail business by Stanley B. N. Igoe, Perle C. Fals, W. Raymond Thackwell, Caryl Bucklen and Russell R. Thackwell.

W. H. Dawson is the proprietor of a new retail business located at 511 East Third Street, Oil City, Pa.

The Progressive Electric Company is a new \$100,000 concern recently opened at Cleveland to carry on a contractor-dealer business. The organizers are Henry Flesher, Elmer J. Flesher, M. L. Dilley, E. Horvath and H. Bolotin.

Messrs. Ward and Bissing are the proprietors of a new retail business at Stockton, Kan.

The Hughes Electric Company is a successful addition to the retail electrical industry at Crooksville, Ohio. Walter Hughes is the proprietor of the new business.

The Motor Company of 633 South Elm Street, Greensboro, N. C., is a new branch of the retail business operated by the company at Winston-Salem, N. C.

I. Joslyn is a new electrical dealer of Mobridge, S. D.

C. L. Stewart has joined the ranks of the Kansas dealers by opening a shop at Americus, Kan.

Messrs. Lloyd and Whitlock have recently organized a retail business at 109-111 East Sherman Street, Hutchinson, Kan.

The Broome Electric Company is a new retail concern recently opened at Slick, Okla.

Fjelstad Brothers are successfully handling a new retail business at La Crosse, Wis.

The Central Electric Company is a new retail business established by A. L. Varley and Stamford Coston at 30 Maple Street, Salamanca, N. Y., to deal in supplies as well as to handle contracting and repairing.

The Smith-LeVee Electric Corporation at Broadway and Ellicott Street, Buffalo, N. Y., is a newcomer to the retail electrical field.

Lee Smith is the proprietor of a retail shop just opened at Louisiana, Mo.

The Electric Machinery Company of Boston, Mass., is the new name of the retail electrical business which is located at 161 Devonshire Street. The new company has a capital stock of \$100,000 and the incorporators are Howard D. Moore of Somerville, Mass., Lemuel W. Peters of Boston and Fred E. Crawford of Watertown, Mass.

The B. A. Massey Electric Company has been opened at 317½ North Gay Street, Knoxville, Tenn.

The H. E. Supnite Company is a Cleveland (Ohio) retail concern whose place of business is located at 742 West Superior Avenue.

The Northern Virginia Power Company, a Virginia central station, has taken a temporary lease on the Easterday Building on South Charles Street, Charlestown, W. Va., to carry on the merchandising of electrical appliances. The company plans to move to permanent quarters very shortly.

Messrs. Gill and Thomas are conducting a new retail business at West Branch, Ia.



Alternating current, R. E. Russell assures us, is not necessarily a mistake. Yet the taste for it is really an acquired one. And as long as the storage battery has not been educated up to changing its mind 120 times a second, Mr. Russell expects to keep quite busy bossing the distribution and selling of uncyclers in the Tunger department of the General Electric Company. Incidentally, readers with gray in their hair will be interested in learning that Mr. Russell is the son of the famous actor Sol Smith Russell, a favorite of the American stage in the '80s and '90s.

The Cohn & Mandly Electric Company of 222 Pearl Street, Hartford, Conn., is the new name of the retail business formerly conducted by the Cohn & Roth Electric Company. The company has also increased its capital stock from \$10,000 to \$25,000.

T. A. Demanty is conducting a new retail business at Lindsay, Cal.

W. I. Henry and Clyde Gourley of Punxsutawney, Pa., have purchased the store on East Mahoning Street formerly operated as an auto accessory business by Taylor Brothers, which they will sell out and replace with an electrical supply and equipment shop in connection with their present business on South Jefferson Street.

S. W. Caston is a new contractor-dealer of Salamanca, N. Y. His shop is located on Wait Avenue.

Messrs. Curtis and Myers are the proprietors of a new retail electrical business at Benton Harbor, Mich.

Messrs. DeBree and Mikesell are conducting a new retail electrical business at Three Rivers, Mich.

The Household Electric Company can now be listed among the Indiana retail electrical dealers. The new business is located at Anderson, Ind.

The Electrical Contracting & Supply Company has been incorporated at Hammond, Ind., to deal in electrical supplies and appliances. The new company has a capital stock of \$25,000 and was organized by L. P. Halligan and others.

M. Rutherford is conducting a successful retail electrical business at Muncie, Ind.

The Premier Electric Supply Company is another Brooklyn (N. Y.) shop recently opened. It is located at 626 Broadway.

Fred P. Gottschalk, a Plainfield (N. J.) contractor, has removed his contracting business to 146 North Avenue, where he will add a line of electrical accessories and equipment.

The Stearn, Davies & Holmes Company is a recent addition to the New Jersey retail electrical industry. This shop is located at Grantwood, N. J.

E. I. Coffey & Company, electrical contractors of Woodbridge, N. J., are planning to open an electrical supply business about April 1 at 134 Main Street.

O. B. Ames is planning to open a retail electrical business at Woodbridge, N. J., in the Concanon Building, Pearl Street, about April 1. Mr. Ames is now in the contracting business at Woodbridge.

Arlington's Electric Shop is the name of a new retail business recently established at Albion, Mich.

John Schmitt has joined the ranks of the Michigan electrical dealers by opening a shop at Wakefield, Mich.

The Radiant Electric Company, Inc., of Binghamton, N. Y., is a new retail electrical concern recently incorporated with a capital stock of \$5,000 by V. D. Sturdevant and others. The new company is the successor to the Binghamton Electrical Company.

The Sayville Electric Shop, of which J. C. Koman is proprietor, is the name of a new addition to the retail electrical field at Sayville, N. Y. The shop is located in the Gillette Building.

P. E. Johnson is successfully holding his "own" in the retail electrical industry at Silver Creek, N. Y. The address of his new shop is 37 Main Street.

C. E. Meyers is a newcomer to the Ohio retail electrical field. His shop is located at Bellefontaine.

The National Electric Heating Company, Ltd. of 544-546-548 Queen Street East, Toronto, is the exclusive factory distributor in Canada of the Air-Way Electric Appliance Corporation of Toledo.

